http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s US 20060070863/pn
L1            0 US 20060070863/PN
                (US20060070863/PN)

=> s US 20080070863/pn
L2            1 US 20080070863/PN
                (US20080070863/PN)

=> d l2 ibib abs ti all

L2   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2005:470211  CAPLUS  Full-text
DOCUMENT NUMBER:          143:2640
TITLE:                    Synergistic insecticidal combinations
comprising
                          anthranilic acid amides and pyrethroids.
INVENTOR(S):              Funke, Christian; Fischer, Reiner; Fischer,
Ruediger;
                          Hungenberg, Heike; Andersch, Wolfram;
Thielert,
                          Wolfgang; Kraus, Anton
PATENT ASSIGNEE(S):       Bayer Cropscience Aktiengesellschaft, Germany
SOURCE:                   PCT Int. Appl., 64 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 German
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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     WO 2005048713        A1    20050602    WO 2004-EP12330
20041030
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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ,
DE, DK,
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RO, SE,
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SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG

DE 102004021564 A1 20050707 DE 2004-102004021564 20040503

AU 2004290502 A1 20050602 AU 2004-290502 20041030

EP 1686859 A1 20060809 EP 2004-791083 20041030

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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CN 1882245 A 20061220 CN 2004-80033692 20041030

BR 2004016560 A 20070123 BR 2004-16560 20041030

JP 2007510683 T 20070426 JP 2006-538722 20041030

IN 2006DN02516 A 20070406 IN 2006-DN2516 20060504

MX 2006005262 A 20060720 MX 2006-5262 20060510

KR 2006126498 A 20061207 KR 2006-711507 20060612

US 20080070863 A1 20080320 US 2007-579076 20070928 <--

PRIORITY APPLN. INFO.: DE 2003-10353280 A 20031114

DE 2004-102004021564A 20040503

WO 2004-EP12330 W 20041030

OTHER SOURCE(S): MARPAT 143:2640

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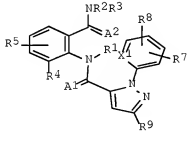

I

AB Synergistic insecticidal combinations comprise anthranilic acid amides I [A1, A2 = O or S; X1 = N or (un)substituted NH; R1 = H, (un)substituted alkyl, alkenyl, alkynyl or cycloalkyl; R2 = H, alkyl, alkenyl, alkynyl, alkoxy, cycloalkyl, etc.; R3 = H, (un)substituted alkyl, alkenyl, etc.; R2NR3 = ring; R4 = H,

(halo)alkyl, (halo)alkenyl, (halo)alkynyl, (halo)cycloalkyl, (un)substituted Ph, benzyl, PhO, etc; R5, R8 = H, halo, (un)substituted (halo)alkyl, etc.; R7 = H, halo (halo)alkyl, (halo)alkoxy, etc,; R9 = haloalkyl, haloalkoxy, haloalkylsulfinyl or halo] and pyrethroids.

TI Synergistic insecticidal combinations comprising anthranilic acid amides
and pyrethroids.

AN 2005:470211 CAPLUS Full-text

DN 143:2640

ED Entered STN: 02 Jun 2005

TI Synergistic insecticidal combinations comprising anthranilic acid amides
and pyrethroids.

IN Funke, Christian; Fischer, Reiner; Fischer, Ruediger; Hungenberg, Heike;
Andersch, Wolfram; Thielert, Wolfgang; Kraus, Anton

PA Bayer Cropscience Aktiengesellschaft, Germany

SO PCT Int. Appl., 64 pp.
CODEN: PIXXD2

DT Patent

LA German

IC ICM A01N043-56
ICS A01N055-10; A01N053-14; A01N053-10; A01N053-08; A01N053-06; A01N053-04; A01N053-00; A01N047-02; A01N037-34; A01N031-14

CC 5-4 (Agrochemical Bioregulators)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005048713	A1	20050602	WO 2004-EP12330	20041030
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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AU 2004290502	A1	20050602	AU 2004-290502	20041030

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     EP 1686859           A1    20060809    EP 2004-791083
20041030
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MC, PT,
             IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK
     CN 1882245           A     20061220    CN 2004-80033692
20041030
     BR 2004016560        A     20070123    BR 2004-16560
20041030
     JP 2007510683        T     20070426    JP 2006-538722
20041030
     IN 2006DN02516       A     20070406    IN 2006-DN2516
20060504
     MX 2006005262        A     20060720    MX 2006-5262
20060510
     KR 2006126498        A     20061207    KR 2006-711507
20060612
     US 20080070863       A1    20080320    US 2007-579076
20070928 <--
PRAI DE 2003-10353280     A     20031114
     DE 2004-102004021564 A     20040503
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http://www.cas.org/support/stngen/stndoc/properties.html

=> S 852369-60-9/RN

L3            1 852369-60-9/RN

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SET COMMAND COMPLETED

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THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L3   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   852369-60-9  REGISTRY
CN   Cyclopropanecarboxylic acid, 3-(2,2-dibromoethenyl)-2,2-dimethyl-,
     (S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3R)-, mixt. with
     N-[4-chloro-2-methyl-6-[[(1-methylethyl)amino]carbonyl]phenyl]-1-
(3-chloro-
     2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazole-5-carboxamide (9CI)
(CA
     INDEX NAME)
FS   STEREOSEARCH
MF   C22 H19 Br2 N O3 . C21 H18 Cl2 F3 N5 O2
CI   MXS
SR   CA
LC   STN Files:   CA, CAPLUS, USPATFULL
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  BIOL (Biological study); USES (Uses)
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CRN 500008-00-4
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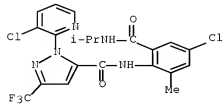
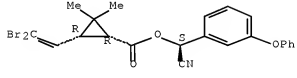


CM 2

CRN 52918-63-5
CMF C22 H19 Br2 N O3

Absolute stereochemistry.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 852369-62-1/RN

L4 1 852369-62-1/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L4 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L4 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 852369-62-1 REGISTRY
CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-

propenyl]-
2,2-dimethyl-, (R)-cyano(3-phenoxyphenyl)methyl ester, (1S,3S)-
rel-, mixt.
with N-[4-chloro-2-methyl-6-[[(1-
methylethyl)amino]carbonyl]phenyl]-1-(3-
chloro-2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazole-5-carboxamide
(9CI)
(CA INDEX NAME)
FS STEREOSEARCH
MF C23 H19 Cl F3 N O3 . C21 H18 Cl2 F3 N5 O2
CI MXS
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); USES (Uses)

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CRN 500008-00-4
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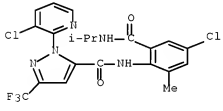
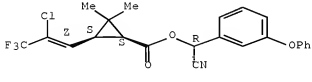


CM 2

CRN 91465-08-6
CMF C23 H19 Cl F3 N O3

Relative stereochemistry.
Double bond geometry as shown.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

http://www.cas.org/support/stngen/stndoc/properties.html

=> S 852369-63-2/RN

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L5            1 852369-63-2/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L5 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L5   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   852369-63-2  REGISTRY
CN   Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-
,
     cyano(4-fluoro-3-phenoxyphenyl)methyl ester, mixt. with
     N-[4-chloro-2-methyl-6-[[(1-methylethyl)amino]carbonyl]phenyl]-1-
(3-chloro-
     2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazole-5-carboxamide (9CI)
(CA
     INDEX NAME)
MF   C22 H18 Cl2 F N O3 . C21 H18 Cl2 F3 N5 O2
CI   MXS
SR   CA
LC   STN Files:   CA, CAPLUS, USPATFULL
DT.CA  CAplus document type:  Patent
RL.P   Roles from patents:  BIOL (Biological study); USES (Uses)

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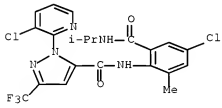


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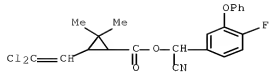

=> D L5 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 852369-63-2 REGISTRY
CN Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-
,
cyano(4-fluoro-3-phenoxyphenyl)methyl ester, mixt. with
N-[4-chloro-2-methyl-6-[[(1-methylethyl)amino]carbonyl]phenyl]-1-
(3-chloro-
2-pyridinyl)-3-(trifluoromethyl)-1H-pyrazole-5-carboxamide (9CI)
(CA
INDEX NAME)
MF C22 H18 Cl2 F N O3 . C21 H18 Cl2 F3 N5 O2
CI MXS
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); USES (Uses)

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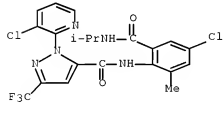

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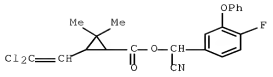

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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

http://www.cas.org/support/stngen/stndoc/properties.html

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L6 1 10453-86-8/RN

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THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 10453-86-8 REGISTRY
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propen-1-yl)-,
[5-(phenylmethyl)-3-furanyl]methyl ester (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 3-Furanmethanol, 5-benzyl-, 2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarboxylate (8CI)
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-,
[5-(phenylmethyl)-3-furanyl]methyl ester (9CI)
CN Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methylpropenyl)-, (5-benzyl-3-furyl)methyl ester (8CI)
OTHER NAMES:
CN (5-Benzyl-3-furyl)methyl 2,2-dimethyl-3-(2-methylpropenyl)cyclopropanecarboxylate
CN (5-Benzyl-3-furyl)methyl chrysanthemate
CN (5-Benzyl-3-furyl)methyl-DL-cis, trans-chrysanthemate
CN 5-Benzyl-3-furylmethyl (±)-cis-trans-chrysanthemate
CN 5-Benzylfurfuryl chrysanthemate
CN ARI-B
CN Chrysron
CN Crossfire
CN dl-cis,trans-[(5-Benzyl-3-furyl)methyl]chrysanthemumate
CN Enforcer
CN NIA 17370
CN NRDC 104
CN Penick 1382

CN Penncapthrin
CN Pyresthrin
CN Resmethrin
CN SBP 1382
CN SBP 1383
CN Seco
CN [5-(Phenylmethyl)-3-furanyl]methyl
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DR 24004-07-7
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DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MSDS-OHS,
PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USPAT2,
USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Conference; Dissertation; Journal; Patent; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);
OCCU (Occurrence); PREP (Preparation); PROC (Process); RACT (Reactant or
reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological
study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent);
USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
study); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC
(Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses);
NORL (No role in record)
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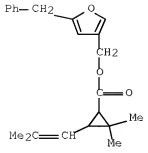
study); OCCU (Occurrence)



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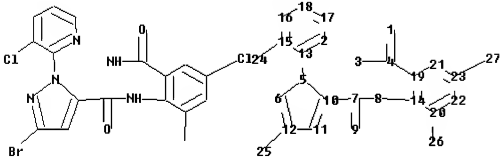

chain nodes :
1 3 4 7 8 9 24 25 26 27
ring nodes :
2 5 6 10 11 12 13 14 15 16 17 18 19 20 21 22 23
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ring bonds :
2-13 2-17 5-10 5-6 6-12 10-11 11-12 13-15 14-19 14-20 15-16 16-18 17-18 19-21 20-22 21-23 22-23
exact/norm bonds :
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exact bonds :
4-19 7-10 12-25 15-24 20-26 23-27
normalized bonds :
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Match level :
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L7      STRUCTURE UPLOADED

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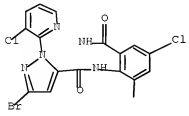

http://www.cas.org/legal/infopolicy.html

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This file contains CAS Registry Numbers for easy and accurate
substance identification.

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L10           27 L9 AND PESTICIDES/CT

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             28 PRIES
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L12  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2003:154408  CAPLUS  Full-text
DOCUMENT NUMBER:          138:205054
TITLE:                    Preparation of substituted anthranilamides for
                          controlling invertebrate pests
INVENTOR(S):              Finkelstein, Bruce Lawrence; Lahm, George
Philip;
                          McCann, Stephen Frederick; Song, Ying;
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Stevenson,
Thomas Martin
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003016284	A1	20030227	WO 2002-US26960	20020813 <--
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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JP 2005503384	T	20050203	JP 2003-521210	20020813 <--
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IN 2004MN00027	A	20050429	IN 2004-MN27	20040112 <--
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KR 869002	B1	20081117	KR 2004-702143	20040213 <--

US 20050282868 A1 20051222 US 2004-486312
20040722 <--
US 7199138 B2 20070403
US 20070203201 A1 20070830 US 2007-700584
20070131 <--
PRIORITY APPLN. INFO.: US 2001-312680P P
20010816 <--
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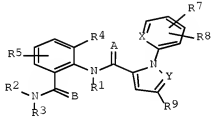
US 2004-486312 A3
20040722
OTHER SOURCE(S): MARPAT 138:205054
GI



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AB The title compds. [I; A, B = O, S; X = N, CR10; Y = N, CH; R1 = H, alkyl, cycloalkyl, etc.; R2 = alkyl, alkenyl, cycloalkyl, etc.; R3 = H, alkyl, alkenyl, etc.; NR2R3 = (un)substituted ring optionally containing addnl. heteroatom; R4 = alkyl, haloalkyl, CN, etc.; R5, R8 = H, alkyl, haloalkyl, etc.; R7 = H, alkyl, haloalkyl, etc.; R9 = CF3, OCF3, OCHF2, etc.; R10 = H, alkyl, haloalkyl, etc.], useful for controlling an invertebrate pest, were prepared E.g., a 3-step synthesis of I [A, B = O; X = CH; Y = N; R1 = H; R2 = iso-Pr; R3 = H; R4 = Me; R5 = H; R7 = 2-(CH2OH); R8 = H; R9 = CF3], starting from 1-[2-(methoxycarbonyl)phenyl]-3-trifluoromethyl-1H-pyrazole-5-carboxylic acid and 2-amino-3-methylbenzoic acid, which provided excellent levels of plant protection (20% or less damage) in biol. tests, was given.

TI Preparation of substituted anthranilamides for controlling invertebrate pests

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

http://www.cas.org/support/stngen/stndoc/properties.html

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E12           1     104530-00-9/RN

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L13           1 10453-86-8/RN

=> d l13

L13  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   10453-86-8  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propen-1-
yl)-,
     [5-(phenylmethyl)-3-furanyl]methyl ester  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   3-Furanmethanol, 5-benzyl-, 2,2-dimethyl-3-(2-
     methylpropenyl)cyclopropanecarboxylate (8CI)
CN   Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-
,
     [5-(phenylmethyl)-3-furanyl]methyl ester (9CI)
CN   Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methylpropenyl)-,
     (5-benzyl-3-furyl)methyl ester (8CI)
OTHER NAMES:
CN   (5-Benzyl-3-furyl)methyl 2,2-dimethyl-3-(2-
     methylpropenyl)cyclopropanecarboxylate
CN   (5-Benzyl-3-furyl)methyl chrysanthemate
CN   (5-Benzyl-3-furyl)methyl-DL-cis, trans-chrysanthemate
CN   5-Benzyl-3-furylmethyl (±)-cis-trans-chrysanthemate
CN   5-Benzylfurfuryl chrysanthemate
CN   ARI-B
CN   Chrysron
CN   Crossfire
CN   dl-cis,trans-[(5-Benzyl-3-furyl)methyl]chrysanthemumate
CN   Enforcer
CN   NIA 17370
CN   NRDC 104
CN   Penick 1382
CN   Penncapthrin
CN   Pyresthrin
CN   Resmethrin
CN   SBP 1382
CN   SBP 1383
CN   Seco
CN   [5-(Phenylmethyl)-3-furanyl]methyl
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DR   24004-07-7
MF   C22 H26 O3
CI   COM
LC   STN Files:   AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
BIOTECHNO, CA,
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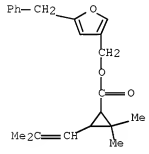
CSNB,
DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE,
MSDS-OHS,
PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USPAT2,
USPATFULL, USPATOLD
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

812 REFERENCES IN FILE CA (1907 TO DATE)
73 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
819 REFERENCES IN FILE CAPLUS (1907 TO DATE

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

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=> s l12 and l13
            819 L13
L15           0 L12 AND L13

=> d l12 ibib abs ti all

L12  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2003:154408  CAPLUS  Full-text
DOCUMENT NUMBER:          138:205054
TITLE:                    Preparation of substituted anthranilamides for
                          controlling invertebrate pests
INVENTOR(S):              Finkelstein, Bruce Lawrence; Lahm, George
Philip;
                          McCann, Stephen Frederick; Song, Ying;
Stevenson,
                          Thomas Martin
PATENT ASSIGNEE(S):       E. I. Du Pont de Nemours & Co., USA
SOURCE:                   PCT Int. Appl., 105 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
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FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003016284	A1	20030227	WO 2002-US26960	20020813 <--
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
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AU 2002326748	B2	20080626		
EP 1417176	A1	20040512	EP 2002-761486	20020813 <--
EP 1417176	B1	20081217		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
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JP 2005503384	T	20050203	JP 2003-521210	20020813 <--
JP 4224397	B2	20090212		
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US 20070203201	A1	20070830	US 2007-700584	20070131 <--
PRIORITY APPLN. INFO.:			US 2001-312680P	P 20010816 <--

WO 2002-US26960 W
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US 2004-486312 A3
20040722
OTHER SOURCE(S): MARPAT 138:205054
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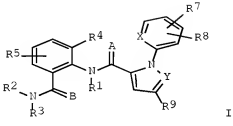

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AB The title compds. [I; A, B = O, S; X = N, CR10; Y = N, CH; R1 = H, alkyl, cycloalkyl, etc.; R2 = alkyl, alkenyl, cycloalkyl, etc.; R3 = H, alkyl, alkenyl, etc.; NR2R3 = (un)substituted ring optionally containing addnl. heteroatom; R4 = alkyl, haloalkyl, CN, etc.; R5, R8 = H, alkyl, haloalkyl, etc.; R7 = H, alkyl, haloalkyl, etc.; R9 = CF3, OCF3, OCHF2, etc.; R10 = H, alkyl, haloalkyl, etc.], useful for controlling an invertebrate pest, were prepared E.g., a 3-step synthesis of I [A, B = O; X = CH; Y = N; R1 = H; R2 = iso-Pr; R3 = H; R4 = Me; R5 = H; R7 = 2-(CH2OH); R8 = H; R9 = CF3], starting from 1-[2-(methoxycarbonyl)phenyl]-3-trifluoromethyl-1H-pyrazole-5-carboxylic acid and 2-amino-3-methylbenzoic acid, which provided excellent levels of plant protection (20% or less damage) in biol. tests, was given.

TI Preparation of substituted anthranilamides for controlling invertebrate pests

AN 2003:154408 CAPLUS Full-text

DN 138:205054

ED Entered STN: 28 Feb 2003

TI Preparation of substituted anthranilamides for controlling invertebrate pests

IN Finkelstein, Bruce Lawrence; Lahm, George Philip; McCann, Stephen Frederick; Song, Ying; Stevenson, Thomas Martin

PA E. I. Du Pont de Nemours & Co., USA

SO PCT Int. Appl., 105 pp.
CODEN: PIXXD2

DT Patent

LA English

IC ICM C07D231-14
ICS C07D401-04; A01N043-56

CC 28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 5

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GE, GH,
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MC, NL,
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ML, MR,
             NE, SN, TD, TG
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     US 20070203201       A1    20070830    US 2007-700584
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     US 2004-486312       A3    20040722

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L16 1 500028-88-6/RN

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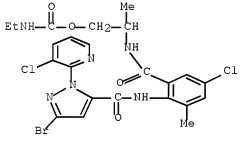
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L16 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 500028-88-6 REGISTRY
CN Carbamic acid, ethyl-, 2-[[2-[[[3-bromo-1-(3-chloro-2-pyridinyl)-1H-
pyrazol-5-yl]carbonyl]amino]-5-chloro-3-methylbenzoyl]amino]propyl ester
(9CI) (CA INDEX NAME)
MF C23 H23 Br Cl2 N6 O4
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES
(Uses)



http://www.cas.org/support/stngen/stndoc/properties.html

=> S 500028-79-5/RN

L17 1 500028-79-5/RN

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=> D L17 SQIDE 1-

L17 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
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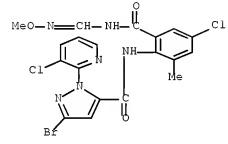
CN 1H-Pyrazole-5-carboxamide, 3-bromo-N-[4-chloro-2-

[[[(methoxyamino)methylene]amino]carbonyl]-6-methylphenyl]-1-(3-chloro-2-
pyridinyl)- (CA INDEX NAME)
MF C19 H15 Br Cl2 N6 O3
SR CA
LC STN Files: CA, CAPLUS, USPAT2, USPATFULL
DT.CA CAplus document type: Patent
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES
(Uses)



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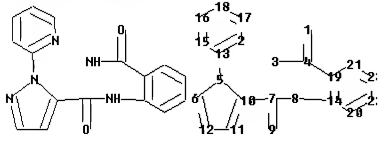

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ring nodes :
2 5 6 10 11 12 13 14 15 16 17 18 19 20 21 22 23
chain bonds :
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ring bonds :
2-13 2-17 5-10 5-6 6-12 10-11 11-12 13-15 14-19 14-20 15-16 16-18 17-18 19-21 20-22 21-23 22-23
exact/norm bonds :
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exact bonds :
4-19 7-10
normalized bonds :
2-13 2-17 13-15 14-19 14-20 15-16 16-18 17-18 19-21 20-22 21-23 22-23

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Match level :
1:CLASS  2:Atom  3:CLASS  4:CLASS  5:Atom  6:Atom  7:CLASS  8:CLASS
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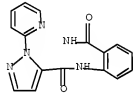

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E14           1     ACRINAMINE/CN
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=> s e15
L21           1 ACRINATHRIN/CN

=> d l21

L21  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   101007-06-1  REGISTRY
ED   Entered STN:  22 Mar 1986
CN   Cyclopropanecarboxylic acid, 2,2-dimethyl-3-[(1Z)-3-oxo-3-[2,2,2-
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     1-(trifluoromethyl)ethoxy]-1-propen-1-yl]-,
     (S)-cyano(3-phenoxyphenyl)methyl ester, (1R,3S)-  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Cyclopropanecarboxylic acid, 2,2-dimethyl-3-[(1Z)-3-oxo-3-[2,2,2-
trifluoro-
     1-(trifluoromethyl)ethoxy]-1-propenyl]-, (S)-cyano(3-
phenoxyphenyl)methyl
     ester, (1R,3S)- (9CI)
CN   Cyclopropanecarboxylic acid, 2,2-dimethyl-3-[3-oxo-3-[2,2,2-
trifluoro-1-
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(trifluoromethyl)ethoxy]-1-propenyl]-, cyano(3-phenoxyphenyl)methyl ester,
[1R-[1α(S*),3α(Z)]]-
OTHER NAMES:
CN ACR 50
CN ACR 50 (pesticide)
CN Acrinathrin
CN Ardent
CN HOE 076003
CN NU 702
CN Orytis
CN RU 38702
CN Rufast
FS STEREOSEARCH
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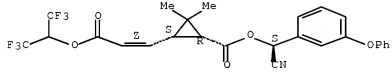
CI COM
SR CA
LC STN Files: AGRICOLA, ANABSTR, BIOSIS, CA, CAPLUS, CASREACT, CBNB,
CHEMCATS, CHEMLIST, CSCHEM, MRCK*, MSDS-OHS, PROMT, RTECS*, TOXCENTER,
USPAT2, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

330 REFERENCES IN FILE CA (1907 TO DATE)
63 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
335 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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RIDE/CN
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AUREUS STRAIN
                     MRSA252 GENE MALA)/CN
E32          1      ALPHA-D-1,4-GLUCOSIDASE (STAPHYLOCOCCUS AUREUS
AUREUS STRAIN
                     MSSA476)/CN
E33          1      ALPHA-D-1,4-GLUCOSIDASE (STAPHYLOCOCCUS AUREUS
STRAIN ET3-1
                    GENE MALA)/CN
E34          1      ALPHA-D-1,4-GLUCOSIDASE (STAPHYLOCOCCUS AUREUS
STRAIN MU50 G
                    ENE MALA)/CN
E35          1      ALPHA-D-1,4-GLUCOSIDASE (STAPHYLOCOCCUS AUREUS
STRAIN RF122
                    GENE MALA)/CN
E36          1      ALPHA-D-1,4-GLUCOSIDASE (STAPHYLOCOCCUS EPIDERMIDIS
STRAIN A
                    TCC12228 GENE SE1191)/CN

=> e alpha cypermethrin/cn
E37          1      ALPHA CONOTOXIN QCAL-1 (CONUS QUERCINUS)/CN
E38          1      ALPHA CONOTOXIN QCAL-2 (CONUS QUERCINUS)/CN
E39          0 --> ALPHA CYPERMETHRIN/CN
E40          1      ALPHA D3/CN
E41          1      ALPHA DNA POLYMERASE (CRYPTOCOCCUS NEOFORMANS
NEOFORMANS STR
                    AIN JEC21)/CN
E42          1      ALPHA E1 ESTERASE (HAEMATOBIA IRRITANS STRAIN CAMP
COOLEY-4/
                    97 GENE AE1)/CN
E43          1      ALPHA E7 ESTERASE (HAEMATOBIA IRRITANS IRRITANS
STRAIN CAMP
                    COOLEY 4/97 CLONE HF41CC GENE AE7)/CN
E44          1      ALPHA E8 ESTERASE (HAEMATOBIA IRRITANS STRAIN CAMP
COOLEY-4/
                    97 GENE AE8)/CN
E45          3      ALPHA ENDOSULFINE (HUMAN)/CN
E46          1      ALPHA ENOLASE (HUMAN CLONE 23942)/CN
E47          1      ALPHA ENOLASE LIKE 1 (HUMAN GENE ENO1L1)/CN
E48          1      ALPHA ENOLASE/TAU-CRYSTALLIN (FICEDULA HYPOLEUCA
ISOLATE OS3
                    )/CN

=> e  cypermethrin/cn
E49          1      CYPERIN/CN
E50          1      CYPERKILL/CN
E51          1 --> CYPERMETHRIN/CN
E52          1      CYPERMETHRIN, D-TRANS-A/CN
E53          1      CYPERMETHRIN, D-TRANS-B/CN
E54          1      CYPERMETHRIN-ABAMECTIN MIXT./CN
E55          1      CYPERMETHRIN-ACEPHATE MIXT./CN
E56          1      CYPERMETHRIN-ACETAMIPRID MIXT./CN
E57          1      CYPERMETHRIN-ALLYL ISOTHIOCYANATE MIXT./CN
E58          1      CYPERMETHRIN-AVERMECTIN MIXT./CN
E59          1      CYPERMETHRIN-BACILLUS THURINGIENSIS MIXT./CN
```

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E60           1     CYPERMETHRIN-BENSULTAP MIXT./CN

=> s e51
L22           1 CYPERMETHRIN/CN

=> d l22

L22  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   52315-07-8  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-
,
     cyano(3-phenoxyphenyl)methyl ester  (CA INDEX NAME)
OTHER NAMES:
CN   α-Cyano-m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-
     dimethylcyclopropanecarboxylate
CN   Agrometrin
CN   Agrothrin
CN   Almetrin
CN   Ambush C
CN   Ambush CY
CN   Ammo
CN   Ammo (pesticide)
CN   Antiborer 3767
CN   Ardap
CN   Arrivo
CN   Asymmethrin
CN   Bandit
CN   Barrage
CN   Barricade
CN   Barricade (insecticide)
CN   Barricade 10EC
CN   Basathrin
CN   Battery (insecticide)
CN   Beta-cypermethrin
CN   CCN 52
CN   Chinimix
CN   Chinmix
CN   Cilcord
CN   cis-Cypermethrin
CN   Colt
CN   Creokhin
CN   Cybil
CN   Cymbush
CN   Cymet
CN   Cympa-Ti
CN   Cymperator
CN   Cyperco
CN   Cyperil
CN   Cyperkill
CN   Cypermethrin
CN   Cypor
CN   Demon
CN   Demon TC
CN   Dimcyp
CN   Drago
CN   Ecofleece Sheep Dip (Non-OP)
```
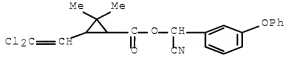

CN Ectomin
CN Ectopor
CN Excis
CN EXP 5598
CN Fenom
CN Fenom (pesticide)
CN Flytick
CN FMC 30980
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
    DISPLAY
DR 727730-89-4, 97955-44-7, 139203-31-9, 137497-61-1, 69865-47-0,
    142443-95-6, 146909-55-9, 86752-99-0, 86753-92-6, 88161-75-5,
159940-28-0,
    186554-45-0
MF C22 H19 Cl2 N O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
BIOTECHNO, CA,
      CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,
CSNB,
      DDFU, DETHERM*, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB,
IPA,
      MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, RTECS*, TOXCENTER,
ULIDAT, USAN,
      USPAT2, USPATFULL, VETU
        (*File contains numerically searchable property data)
    Other Sources: EINECS**
        (**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

          5818 REFERENCES IN FILE CA (1907 TO DATE)
           184 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
          5855 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e betacyfluthrin/cn
E61   1   BETACYAMINE/CN
E62   1   BETACYANINS/CN
E63   0 --> BETACYFLUTHRIN/CN
E64   1   BETACYFLUTHRIN-CHLORPYRIFOS MIXT./CN
E65   1   BETACYHALOTHRIN/CN
E66   1   BETACYLINDRIN/CN
E67   1   BETADET DM 20/CN
E68   1   BETADET HR/CN
E69   1   BETADET HR-E/CN

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E70             1     BETADET S 20/CN
E71             1     BETADET SC 2/CN
E72             1     BETADET SH-R/CN

=> e cyfluthrin/cn
E73             1     CYFLUMETOFEN-SPIROMESIFEN MIXT./CN
E74             1     CYFLUMETOFEN-SPIROTETRAMAT MIXT./CN
E75             1 --> CYFLUTHRIN/CN
E76             1     CYFLUTHRIN-ALLYL ISOTHIOCYANATE MIXT./CN
E77             1     CYFLUTHRIN-CHLORPYRIFOS-METHYL MIXT./CN
E78             1     CYFLUTHRIN-ETHION MIXT./CN
E79             1     CYFLUTHRIN-FENAMIDONE MIXT./CN
E80             1     CYFLUTHRIN-IMIDACLOPRID MIXT./CN
E81             1     CYFLUTHRIN-PENTHIOPYRAD MIXT./CN
E82             1     CYFLUTHRIN-PHOXIM MIXT./CN
E83             1     CYFLUTHRIN-PIPERONYL BUTOXIDE MIXT./CN
E84             1     CYFLUTHRIN-PIPERONYL BUTOXIDE-CHLORPYRIFOS-METHYL
MIXT./CN

=> s e75
L23             1 CYFLUTHRIN/CN

=> d l23

L23  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   68359-37-5  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-
,
     cyano(4-fluoro-3-phenoxyphenyl)methyl ester  (CA INDEX NAME)
OTHER NAMES:
CN   α-Cyano-3-phenoxy-4-fluorobenzyl
     2,2-dimethyl-3-(2,2-dichlorovinyl)cyclopropanecarboxylate
CN   BAY-FCR 1272
CN   BAY-Vl 1704
CN   Baythroid
CN   Baythroid XL
CN   Beta-Baythroid
CN   Beta-cyfluthrin
CN   Bulldock
CN   Bulldock 125SC
CN   Cyfluthrin
CN   Cyfoxylate
CN   Eulan SP
CN   FCR 1272
CN   FCR 4545
CN   Optem PT 600
CN   Renounce
CN   Responsar
CN   Solfac
CN   Syfrutrin
CN   Tempo 2
CN   Tempo Ultra
CN   Tombstone
DR   85782-82-7, 83855-46-3
MF   C22 H18 Cl2 F N O3
CI   COM
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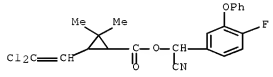
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA,
CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB,
DDFU, DRUGU, EMBASE, HSDB*, MEDLINE, MRCK*, MSDS-OHS, PATDPASPC, PROMT,
RTECS*, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1818 REFERENCES IN FILE CA (1907 TO DATE)
128 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1837 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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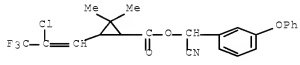
=> e cyhalothrin/cn
E85          1     CYHALOFOP-PROPANIL MIXT./CN
E86          1     CYHALOFOP-TRICLOPYR MIXT./CN
E87          1 --> CYHALOTHRIN/CN
E88          1     CYHALOTHRIN ACID/CN
E89          1     CYHALOTHRIN K/CN
E90          1     CYHALOTHRIN-DEF MIXT./CN
E91          1     CYHALOTHRIN-DIPTEREX MIXT./CN
E92          1     CYHALOTHRIN-EMAMECTIN BENZOATE MIXT./CN
E93          1     CYHALOTHRIN-MONOCROTOPHOS MIXT./CN
E94          1     CYHALOTHRIN-PARATHION MIXT./CN
E95          1     CYHALOTHRIN-PENTHIOPYRAD MIXT./CN
E96          1     CYHALOTHRIN-PHOXIM MIXT./CN

=> s e87
L24          1 CYHALOTHRIN/CN

=> d l24

L24  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   68085-85-8  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propen-
1-yl)-
     2,2-dimethyl-, cyano(3-phenoxyphenyl)methyl ester  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-
propenyl)-2,2-
```

dimethyl-, cyano(3-phenoxyphenyl)methyl ester (9CI)
OTHER NAMES:
CN α-Cyano-3-phenoxybenzyl 3-(2-chloro-3,3,3-trifluoroprop-1-en-1-yl)-
2,2-dimethylcyclopropanecarboxylate
CN Clocythrin
CN Coopertix
CN Cyhalothrin
CN Gongfu
CN Grenade
CN ICI-PP 563
CN PP 563
CN Saber
DR 149436-99-7, 255725-86-1
MF C23 H19 Cl F3 N O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA,
CABA, CAPLUS, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DRUGU,
EMBASE, HSDB*, MEDLINE, MRCK*, MSDS-OHS, PATDPASPC, PIRA, PROMT, RTECS*,
TOXCENTER, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> s l20 and (l21-l24)
           378 L20
           335 L21
          5855 L22
          1837 L23
           964 L24
L25         82 L20 AND ((L21 OR L22 OR L23 OR L24))

=> s l25 and pesticides/ct
         51008 PESTICIDES/CT
L26         13 L25 AND PESTICIDES/CT

=> s l25 and pests/ct
           618 PESTS/CT
L27          1 L25 AND PESTS/CT
```

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=> s l25 and insects/ct
          2069 INSECTS/CT
L28          0 L25 AND INSECTS/CT

=> s l25 and insecticides/ct
         79999 INSECTICIDES/CT
L29          71 L25 AND INSECTICIDES/CT

=> s l29 and l26
L30          10 L29 AND L26

=> s l26 and (py<2003 or ay<2003 or pry<2003)
      22983868 PY<2003
       4505976 AY<2003
       3975310 PRY<2003
L31           2 L26 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> d l31 abs ti hitind ibib 1-2

L31  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2009 ACS on STN
GI
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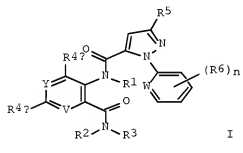

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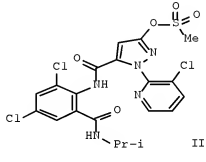


II

AB The invention provides title compds. I and their N-oxides and suitable salts [wherein: Y, V = N or CR4a; W = N, CH, or CR6; R1 = H, (un)substituted alkyl, alkenyl, alkynyl or cycloalkyl, alkylcarbonyl, alkoxycarbonyl, (di)alkylaminocarbonyl; R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl, alkoxy, (di)alkylamino, cycloalkylamino, alkoxycarbonyl, or alkylcarbonyl; R3 = H, G, (un)substituted alkyl, alkenyl, alkynyl or cycloalkyl; or NR2R3 = (un)substituted heterocyclic (N/O/S) ring; G = (un)substituted 5- or 6-membered non-aromatic carbo- or heterocyclic ring; R4a, R4b = H, various carbon and heteroat. substituents; R5 = alk(en/yn)yl, various derivs. of OH, SH, and NH2; R6 = (halo)alk(en/yn)yl, OH and derivs. or thio analogs, halo, cyano, CO2H, (di)alkylamino, (un)substituted Ph, PhCH2, PhCO, PhO, etc.; n = 0-4]. The invention also pertains to compns. for controlling invertebrate pests, comprising a biol. effective amount of I, their N-oxides, or their agronomically or nonagronomically suitable salts, and at

least one addnl. component selected from surfactants, solid diluents, and liquid diluents, and optionally further comprising an effective amount of at least one addnl. biol. active compound or agent. Also disclosed are methods for controlling invertebrate pests by contact of the pests or their environment with said compds. Eighteen compds. I were prepared and tested. For instance, 3-chloro-2-hydrazinopyridine was cyclocondensed with di-Et maleate to give 55% Et 1-(3-chloro-2-pyridinyl)-3-pyrazolidinone-5-carboxylate, which was oxidized to a dihydropyrazolone, saponified to an acid, cyclized with dichloroanthranilic acid to give a benzoxazinone, O-mesylated at the pyrazolone, and ring-opened with MeNH2, to give invention compound II. In a test of larval Plutella xylostella on radish plants, II at 50 ppm (spray) reduced feeding damage by 80% or more. Compds. I were also effective against Spodoptera frugiperda, Myzus persicae, and Empoasca fabae.

TI Novel pyrazole-based anthranilamide insecticides and their preparation,
compositions, and use

IC ICM C07D401-00

CC 28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 5

IT Acaricides
Insecticides
Pesticides

ACCESSION NUMBER: 2004:453202 CAPLUS Full-text
DOCUMENT NUMBER: 141:23526
TITLE: Novel pyrazole-based anthranilamide insecticides and
their preparation, compositions, and use
INVENTOR(S): Hughes, Kenneth Andrew; Lahm, George Philip; Selby,
Thomas Paul
PATENT ASSIGNEE(S): E.I. Du Pont De Nemours and Company, USA
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004046129	A2	20040603	WO 2003-US36167	20031112 <--
WO 2004046129	A3	20040715		

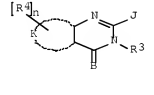
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,

PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2003295491	A1	20040615	AU 2003-295491	20031112 <--
EP 1560820	A2	20050810	EP 2003-786682	20031112 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003015714	A	20050906	BR 2003-15714	20031112 <--
CN 1711255	A	20051221	CN 2003-80103401	20031112 <--
JP 2006514632	T	20060511	JP 2004-553598	20031112 <--
US 20060014808	A1	20060119	US 2005-529612	20050330 <--
MX 2005005025	A	20050803	MX 2005-5025	20050510 <--
PRIORITY APPLN. INFO.:			US 2002-426693P	P 20021115 <--
			WO 2003-US36167	W 20031112

OTHER SOURCE(S): MARPAT 141:23526
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
GI



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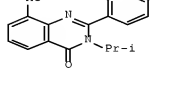

II

AB The title compds. [I; B = O, S; J = (un)substituted Ph, naphthyl, 5-6 membered heteroarom. ring, etc.; K, together with the two contiguous liking carbon atoms = a fused Ph, or fused pyridinyl, each optionally substituted with 1-4 R4; R3 = G, alkyl,

cycloalkyl, etc.; G = (un)substituted Ph, 5-6 membered heteroarom. ring, etc.; R4 = H, alkyl, haloalkyl, etc.; n = 1-4], useful for controlling invertebrate pests, were prepared E.g. a multi-step synthesis of II which provided very good level of plant protection (20% or less feeding damage) in in test on diamondback moth (Plutella xylostella)/radish plant, was given. This invention also pertains to certain compds. I and compns. for controlling invertebrate pests comprising a biol. effective amount of a compound I and at least one addnl. component selected from the group consisting of surfactants, solid diluents and liquid diluents. [This abstract record is one of 3 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]

ACCESSION NUMBER: 2002:465981 CAPLUS Full-text
DOCUMENT NUMBER: 137:47212
TITLE: Preparation of quinazolinones and pyridopyrimidinones for controlling invertebrate pests
INVENTOR(S): Annis, Gary David; Myers, Brian James; Selby, Thomas Paul; Stevenson, Thomas Martin; Zimmerman, William Thomas
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 180 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002048115	A2	20020620	WO 2001-US46629	20011203 <--
WO 2002048115	A3	20020906		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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     AU 2002027243         A      20020624    AU 2002-27243
20011203 <--
     EP 1341772            A2     20030910    EP 2001-996125
20011203 <--
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MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004515543         T      20040527    JP 2002-549646
20011203 <--
     US 20040110777        A1     20040610    US 2003-433368
20031014 <--
PRIORITY APPLN. INFO.:                         US 2000-254614P     P
20001211 <--
                                               WO 2001-US46629     W
20011203 <--
OTHER SOURCE(S):           MARPAT 137:47212
REFERENCE COUNT:           6      THERE ARE 6 CITED REFERENCES AVAILABLE
FOR THIS
                                  RECORD. ALL CITATIONS AVAILABLE IN THE
RE FORMAT


=> s l29 and (py<2003 or ay<2003 or pry<2003)
      22983868 PY<2003
       4505976 AY<2003
       3975310 PRY<2003
L32           5 L29 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> d l32 ibib abs ti hit 1-5

L32  ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:          2004:453202  CAPLUS  Full-text
DOCUMENT NUMBER:           141:23526
TITLE:                     Novel pyrazole-based anthranilamide
insecticides and
                           their preparation, compositions, and use
INVENTOR(S):               Hughes, Kenneth Andrew; Lahm, George Philip;
Selby,
                           Thomas Paul
PATENT ASSIGNEE(S):        E.I. Du Pont De Nemours and Company, USA
SOURCE:                    PCT Int. Appl., 96 pp.
                           CODEN: PIXXD2
DOCUMENT TYPE:             Patent
LANGUAGE:                  English
FAMILY ACC. NUM. COUNT:    1
PATENT INFORMATION:

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WO 2003-US36167 W 20031112

OTHER SOURCE(S): MARPAT 141:23526

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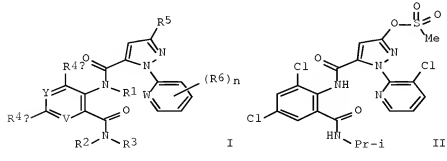

I II

AB The invention provides title compds. I and their N-oxides and suitable salts [wherein: Y, V = N or CR4a; W = N, CH, or CR6; R1 =

H, (un)substituted alkyl, alkenyl, alkynyl or cycloalkyl, alkylcarbonyl, alkoxycarbonyl, (di)alkylaminocarbonyl; R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl, alkoxy, (di)alkylamino, cycloalkylamino, alkoxycarbonyl, or alkylcarbonyl; R3 = H, G, (un)substituted alkyl, alkenyl, alkynyl or cycloalkyl; or NR2R3 = (un)substituted heterocyclic (N/O/S) ring; G = (un)substituted 5- or 6-membered non-aromatic carbo- or heterocyclic ring; R4a, R4b = H, various carbon and heteroat. substituents; R5 = alk(en/yn)yl, various derivs. of OH, SH, and NH2; R6 = (halo)alk(en/yn)yl, OH and derivs. or thio analogs, halo, cyano, CO2H, (di)alkylamino, (un)substituted Ph, PhCH2, PhCO, PhO, etc.; n = 0-4]. The invention also pertains to compns. for controlling invertebrate pests, comprising a biol. effective amount of I, their N-oxides, or their agronomically or nonagronomically suitable salts, and at least one addnl. component selected from surfactants, solid diluents, and liquid diluents, and optionally further comprising an effective amount of at least one addnl. biol. active compound or agent. Also disclosed are methods for controlling invertebrate pests by contact of the pests or their environment with said compds. Eighteen compds. I were prepared and tested. For instance, 3-chloro-2-hydrazinopyridine was cyclocondensed with di-Et maleate to give 55% Et 1-(3-chloro-2-pyridinyl)-3-pyrazolidinone-5-carboxylate, which was oxidized to a dihydropyrazolone, saponified to an acid, cyclized with dichloroanthranilic acid to give a benzoxazinone, O-mesylated at the pyrazolone, and ring-opened with MeNH2, to give invention compound II. In a test of larval Plutella xylostella on radish plants, II at 50 ppm (spray) reduced feeding damage by 80% or more. Compds. I were also effective against Spodoptera frugiperda, Myzus persicae, and Empoasca fabae.

L32 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:261833 CAPLUS Full-text
DOCUMENT NUMBER: 138:287669
TITLE: Preparation of pyrazolylcarbonyl pyridinyl anthranilamides as arthropodicides
INVENTOR(S): Zimmerman, William Thomas
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
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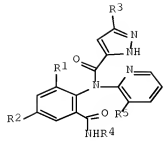

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AB Title compds. [I; R1, R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, haloalkenyl, haloalkynyl, halo, cyano, alkoxy, haloalkoxy, alkylthio, alkylsulfonyl, trialkylsilyl, etc.; R3 = H, alkyl, haloalkyl, halo, cyano, NO2, alkoxy, haloalkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, haloalkylthio, alkoxycarbonyl, etc.; R4 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl; R5 = H, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, haloalkenyl, haloalkynyl, halocycloalkyl, halo, cyano, CO2H, CONH2, NO2, OH, alkoxy, haloalkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, alkylcarbonyl, alkoxycarbonyl, trialkylsilyl, etc.], were prepared Thus, 1-(3-chloro-2-pyridinyl)-3-trifluoromethyl-1H- pyrazole-5-carboxylic acid (preparation given) was stirred with (COCl)2 and cat. DMF in CH2Cl2 to give crude acid chloride, which was refluxed 3 h with 8-methyl-2H-3,1-benzoxazine-2,4(1H)-dione (preparation given) and pyridine in MeCN to give 2-[1-(3-chloro-2-pyridinyl)-3-trifluoromethyl-1H-pyrazol-5- yl]-8-methyl-4H-3,1-benzoxazin-4-one. The latter was refluxed 1.5 h with Me2CHNH2 to give 1-(3-chloro-2-pyridinyl)-N-[2-methyl-6-[[(1-methylethyl)amino]carbonyl]phenyl]-3-trifluoromethyl-1H-pyrazole-5- carboxamide. This was stirred overnight with DBU in MeCN to give N-(3-chloro-2-pyridinyl)-N-[2-methyl-6-[[(1-methylethyl)amino]carbonyl]phenyl]-5-trifluoromethyl-1H-pyrazole-3- carboxamide. The latter at 250 ppm on radishes preinfested with Plutella xylostella gave ≤10% feeding damage.

L32 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:242097 CAPLUS Full-text
DOCUMENT NUMBER: 138:267201
TITLE: Pesticidal compositions for coating plant propagation material containing anthranilamides
INVENTOR(S): Berger, Richard Alan; Flexner, John Lindsey
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 147 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
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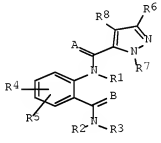

I

AB An invertebrate pest control composition for coating a propagule comprises (1) a biol. effective amount of an anthranilamide compds. I (Markush included), an N-oxide thereof or an agriculturally suitable salt thereof, and (2) a film former or adhesive agent. Arthropodicidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones, γ-aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, and fungicides. The propagule is a seed of cotton, maize, soybean, rice, etc., or a rhizome, tuber, bulb or corm, or viable division thereof, of potato, sweet potato, garden onion, tulip, daffodil, crocus hyacinth, etc., or is a stem or leaf cutting.

L32 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:154155 CAPLUS Full-text
DOCUMENT NUMBER: 138:200332
TITLE: Arthropodicidal anthranilamides
INVENTOR(S): Lahm, George Philip; Selby, Thomas Paul; Stevenson,
Thomas Martin
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4

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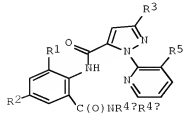

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AB Anthranilamides I (Markush included), their N-oxides and agriculturally suitable salts are prepared as arthropodicides for controlling invertebrate pests. Arthropodicidal compns. containing anthranilamides I may further include addnl. biol. active compds. or agents selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones, γ-aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, Bacillus thuringiensis sp. aizawai, B. thuringiensis sp. kurstaki, B. thuringiensis delta endotoxin, baculoviruses, and entomopathogenic bacteria, viruses and fungi.

L32 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:154154 CAPLUS Full-text
DOCUMENT NUMBER: 138:200331
TITLE: Method for controlling particular insect pests by
applying anthranilamide compounds
INVENTOR(S): Lahm, George Philip; McCann, Stephen Frederick; Patel,
Kanu Maganbhai; Selby, Thomas Paul; Stevenson, Thomas
Martin
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 150 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
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OTHER SOURCE(S): MARPAT 138:200331

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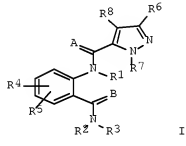


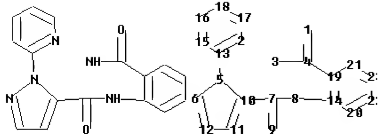
I

AB Anthranilamide compds. I (Markush included), N-oxides or an agriculturally suitable salts thereof are prepared as insecticides for controlling lepidopteran, homopteran, hemipteran, thysanopteran and coleopteran insect pests. Insecticidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones, γ-aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics.

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\10579076 genus anthranilamide.str

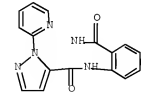


chain nodes :
1 3 4 7 8 9
ring nodes :
2 5 6 10 11 12 13 14 15 16 17 18 19 20 21 22 23
chain bonds :
1-4 3-4 4-19 5-13 7-10 7-8 7-9 8-14
ring bonds :
2-13 2-17 5-10 5-6 6-12 10-11 11-12 13-15 14-19 14-20 15-16
16-18 17-18 19-21 20-22 21-23 22-23
exact/norm bonds :
1-4 3-4 5-10 5-6 5-13 6-12 7-8 7-9 8-14 10-11 11-12
exact bonds :
4-19 7-10
normalized bonds :
2-13 2-17 13-15 14-19 14-20 15-16 16-18 17-18 19-21 20-22 21-
23 22-23

Match level :
1:CLASS 2:Atom 3:CLASS 4:CLASS 5:Atom 6:Atom 7:CLASS 8:CLASS
9:CLASS 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom
17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom

L1 STRUCTURE UPLOADED

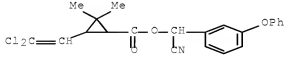
=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query
preparation.

```
=> e cypermethrin/cn
E1            1     CYPERIN/CN
E2            1     CYPERKILL/CN
E3            1 --> CYPERMETHRIN/CN
E4            1     CYPERMETHRIN, D-TRANS-A/CN
E5            1     CYPERMETHRIN, D-TRANS-B/CN
E6            1     CYPERMETHRIN-ABAMECTIN MIXT./CN
E7            1     CYPERMETHRIN-ACEPHATE MIXT./CN
E8            1     CYPERMETHRIN-ACETAMIPRID MIXT./CN
E9            1     CYPERMETHRIN-ALLYL ISOTHIOCYANATE MIXT./CN
E10           1     CYPERMETHRIN-AVERMECTIN MIXT./CN
E11           1     CYPERMETHRIN-BACILLUS THURINGIENSIS MIXT./CN
E12           1     CYPERMETHRIN-BENSULTAP MIXT./CN

=> set expand continuous
SET COMMAND COMPLETED

=> s e3
L2            1 CYPERMETHRIN/CN

=> d l2

L2   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   52315-07-8  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-
,
     cyano(3-phenoxyphenyl)methyl ester  (CA INDEX NAME)
OTHER NAMES:
CN   α-Cyano-m-phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-
     dimethylcyclopropanecarboxylate
CN   Agrometrin
CN   Agrothrin
CN   Almetrin
CN   Ambush C
CN   Ambush CY
CN   Ammo
CN   Ammo (pesticide)
CN   Antiborer 3767
CN   Ardap
CN   Arrivo
CN   Asymmethrin
CN   Bandit
CN   Barrage
CN   Barricade
CN   Barricade (insecticide)
CN   Barricade 10EC
CN   Basathrin
CN   Battery (insecticide)
CN   Beta-cypermethrin
CN   CCN 52
CN   Chinimix
CN   Chinmix
CN   Cilcord
CN   cis-Cypermethrin
CN   Colt
```

CN Creokhin
CN Cybil
CN Cymbush
CN Cymet
CN Cympa-Ti
CN Cymperator
CN Cyperco
CN Cyperil
CN Cyperkill
CN Cypermethrin
CN Cypor
CN Demon
CN Demon TC
CN Dimcyp
CN Drago
CN Ecofleece Sheep Dip (Non-OP)
CN Ectomin
CN Ectopor
CN Excis
CN EXP 5598
CN Fenom
CN Fenom (pesticide)
CN Flytick
CN FMC 30980
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY
DR 727730-89-4, 97955-44-7, 139203-31-9, 137497-61-1, 69865-47-0, 142443-95-6, 146909-55-9, 86752-99-0, 86753-92-6, 88161-75-5, 159940-28-0,
186554-45-0
MF C22 H19 Cl2 N O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA,
CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB,
DDFU, DETHERM*, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA,
MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, RTECS*, TOXCENTER, ULIDAT, USAN,
USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



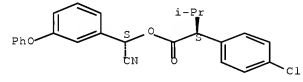
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

```
            5823 REFERENCES IN FILE CA (1907 TO DATE)
             185 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            5861 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> e delta-methrin/cn
E13           1     DELTA-LYSIN II/CN
E14           1     DELTA-LYSIN II (STAPHYLOCOCCUS WARNERI)/CN
E15           0 --> DELTA-METHRIN/CN
E16           1     DELTA-NOTCH-LIKE EGF REPEAT-CONTAINING TRANSMEMBRANE
(HUMAN
                    CLONE MGC:33398 IMAGE:4820343)/CN
E17           1     DELTA-PLASMINOGEN (SYNTHETIC HUMAN)/CN
E18           1     DELTA-SEAL/CN
E19           1     DELTA-STAB/CN
E20           1     DELTA-SUBUNIT OF ETHYLBENZENE DEHYDROGENASE
(AZOARCUS STRAIN
                     EBN1 GENE EBDD)/CN
E21           1     DELTA-TONE 9000/CN
E22           1     DELTA-V (ERYTHROVIRUS B19 CLONE F-2 N-TERMINAL
FRAGMENT)/CN
E23           1     DELTA-V (ERYTHROVIRUS B19 CLONE F-3 N-TERMINAL
FRAGMENT)/CN
E24           1     DELTA-VALEROLACTAM/CN

=> e delta methrin/cn
E25           1     DELTA KURE COREACTANT/CN
E26           1     DELTA KURE RESIN/CN
E27           0 --> DELTA METHRIN/CN
E28           1     DELTA METHYL IONONE/CN
E29           1     DELTA NAIP PROTEIN (MOUSE STRAIN C57BL/6J ISOLATE
B6-235-SP6
                     CLONE B6-235 GENE DELTANAIP FRAGMENT/CN
E30           1     DELTA NE 200/CN
E31           1     DELTA P/CN
E32           1     DELTA PA 441/CN
E33           1     DELTA PA 4410/CN
E34           1     DELTA PA 442/CN
E35           1     DELTA PA 445/CN
E36           1     DELTA PA 450/CN

=> e delta!methrin/cn
E37           1     DELTA TUBULIN (PLASMODIUM FALCIPARUM STRAIN 3D7 GENE
PFI1635
                    W)/CN
E38           1     DELTA X 9/CN
E39           0 --> DELTA!METHRIN/CN
E40           1     DELTA' SUBUNIT (STREPTOCOCCUS PNEUMONIAE STRAIN R6
GENE HOLB
                    )/CN
E41           1     DELTA' SUBUNIT (YERSINIA PESTIS STRAIN CO92 GENE
HOLB)/CN
E42           1     DELTA(12)-FATTY ACID DEHYDROGENASE (PROCHLOROCOCCUS
MARINUS
                    STRAIN MIT 9312)/CN
E43           1     DELTA(2)-ISOPENTENYLPYRO PHOSPHATE TRNA-ADENOSINE
```

```
TRANSFERAS
                    E (ESCHERICHIA COLI O157:H7 STRAIN EDL933 GENE
MIAA)/CN
E44          1      DELTA(2)-ISOPENTENYLPYRO PHOSPHATE TRNA-ADENOSINE
TRANSFERAS
                    E (ESCHERICHIA COLI STRAIN O157:H7 GENE ECS5147)/CN
E45          1      DELTA(2)-ISOPENTENYLPYRO PHOSPHATE TRNA-ADENOSINE
TRANSFERAS
                    E (SALMONELLA ENTERICA TYPHIMURIUM STRAIN LT2; SGSC
1412; AT
                    CC 700720 GENE MIAA)/CN
E46          1      DELTA(2)-ISOPENTENYLPYRO PHOSPHATE TRNA-ADENOSINE
TRANSFERAS
                    E (SHIGELLA FLEXNERI STRAIN 301 GENE MIAA)/CN
E47          1      DELTA(2)-ISOPENTENYLPYRO PHOSPHATE TRNA-ADENOSINE
TRANSFERAS
                    E (YERSINIA PESTIS STRAIN KIM GENE MIAA)/CN
E48          1      DELTA(2)-ISOPENTENYLPYROPHOSPHATE TRNA-ADENOSINE
TRANSFERASE
                     (ACINETOBACTER BAUMANNII STRAIN ATCC 17978)/CN

=> e esfenvalerate/cn
E49          1      ESF 6/CN
E50          1      ESFAR/CN
E51          1 --> ESFENVALERATE/CN
E52          1      ESFENVALERATE-AMITRAZ MIXT./CN
E53          1      ESFENVALERATE-CHLORPYRIFOS MIXT./CN
E54          1      ESFENVALERATE-DEF MIXT./CN
E55          1      ESFENVALERATE-FENITROTHION MIXT./CN
E56          1      ESFENVALERATE-IKI 220 MIXT./CN
E57          1      ESFENVALERATE-IMIDACLOPRID MIXT./CN
E58          1      ESFENVALERATE-PENTHIOPYRAD MIXT./CN
E59          1      ESFENVALERATE-PIPERONYL BUTOXIDE MIXT./CN
E60          1      ESFENVALERATE-THIODAN MIXT./CN

=> s e51
L3           1 ESFENVALERATE/CN

=> d l3

L3   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   66230-04-4  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Benzeneacetic acid, 4-chloro-α-(1-methylethyl)-,
     (S)-cyano(3-phenoxyphenyl)methyl ester, (αS)-  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Benzeneacetic acid, 4-chloro-α-(1-methylethyl)-,
     cyano(3-phenoxyphenyl)methyl ester, [S-(R*,R*)]-
OTHER NAMES:
CN   (S)-α-Cyano-3-phenoxybenzyl (S)-2-(4-chlorophenyl)isovalerate
CN   (S,S)-Fenvalerate
CN   α-Sum
CN   1S,1'S-Fenvalerate
CN   Aα
CN   Asana
CN   Asana XL
```

CN Esfenvalerate
CN Fenvalerate α
CN Fenvalerate Aα
CN OMS 3023
CN S 1844
CN S 5602Aα
CN Sumi-alfa
CN Sumi-alpha
CN Sumi-Gold
CN Sumicidin Aα
CN Sumidan
FS STEREOSEARCH
DR 72650-28-3
MF C25 H22 Cl N O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, CA, CAPLUS,
CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, HSDB*, MRCK*,
MSDS-OHS, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

970 REFERENCES IN FILE CA (1907 TO DATE)
72 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
981 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e ethofenprox/cn
E61 1 ETHOFAT O 15/CN
E62 1 ETHOFAT O 20/CN
E63 1 --> ETHOFENPROX/CN
E64 1 ETHOFENPROX-DACONIL MIXT./CN
E65 1 ETHOFENPROX-DACONIL-PASSPORT MIXT./CN
E66 1 ETHOFENPROX-DIAFENTHIURON MIXT./CN
E67 1 ETHOFENPROX-IKI 220 MIXT./CN
E68 1 ETHOFENPROX-THIODICARB MIXT./CN
E69 1 ETHOFENPROX-TOLFENPYRAD MIXT./CN
E70 1 ETHOFIBRATE/CN
E71 1 ETHOFOR RO 40/CN
E72 1 ETHOFORM/CN

=> s e53

```
L4            1 "ESFENVALERATE-CHLORPYRIFOS MIXT."/CN

=> s e63
L5            1 ETHOFENPROX/CN

=> d l5

L5   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   80844-07-1  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Benzene, 1-[[2-(4-ethoxyphenyl)-2-methylpropoxy]methyl]-3-phenoxy-
(CA
     INDEX NAME)
OTHER NAMES:
CN   2-(4-Ethoxyphenyl)-2-methylpropyl 3-phenoxybenzyl ether
CN   4-Ethoxyneophyl 3-phenoxybenzyl ether
CN   Ethofenprox
CN   Ethophenprox
CN   Ethoproxyfen
CN   Ethoproxyphen
CN   Etof
CN   Etofenprox
CN   MTI 500
CN   SA 130301
CN   Trebon
MF   C25 H28 O3
CI   COM
LC   STN Files:   AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, CA,
CABA,
       CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB,
DDFU,
       DRUGU, MEDLINE, MRCK*, PROMT, RTECS*, TOXCENTER, USAN, USPAT2,
USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:   WHO
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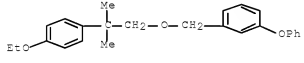


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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

             763 REFERENCES IN FILE CA (1907 TO DATE)
              92 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             768 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> e fenpropathrin/cn
E73           1     FENPRINAST HYDROCHLORIDE/CN
E74           1     FENPROPANATE/CN
E75           1 --> FENPROPATHRIN/CN
```

```
E76           1     FENPROPATHRIN-ABAMECTIN MIXT./CN
E77           1     FENPROPATHRIN-ACEPHATE MIXT./CN
E78           1     FENPROPATHRIN-CLOFENTEZINE MIXT./CN
E79           1     FENPROPATHRIN-EMAMECTIN BENZOATE MIXT./CN
E80           1     FENPROPATHRIN-ENDOSULFAN MIXT./CN
E81           1     FENPROPATHRIN-FENBUTATIN OXIDE MIXT./CN
E82           1     FENPROPATHRIN-HEXYTHIAZOX MIXT./CN
E83           1     FENPROPATHRIN-IKI 220 MIXT./CN
E84           1     FENPROPATHRIN-IVERMECTIN MIXT./CN

=> s e75
L6            1 FENPROPATHRIN/CN

=> d l6

L6   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   39515-41-8  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Cyclopropanecarboxylic acid, 2,2,3,3-tetramethyl-,
     cyano(3-phenoxyphenyl)methyl ester  (CA INDEX NAME)
OTHER NAMES:
CN   (±)-Fenpropathrin
CN   α-Cyano-3-phenoxybenzyl 2,2,3,3-tetramethylcyclopropanecarboxylate
CN   2,2,3,3-Tetramethylcyclopropanecarboxylic acid
     cyano(3-phenoxyphenyl)methyl ester
CN   Danimen
CN   Danitol
CN   Danitol 10EC
CN   Danitol Fiori
CN   Fenpropanate
CN   Fenpropathrin
CN   Kilumal
CN   Meiothrin
CN   Meothrin
CN   Miothrin
CN   Rody
CN   S 3206
CN   SD 41706
CN   Smash
CN   Tame
CN   WL 41706
CN   XE 938
DR   64257-84-7
MF   C22 H23 N O3
CI   COM
LC   STN Files:   AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
BIOTECHNO, CA,
       CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,
CSNB,
       DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE,
MRCK*,
       MSDS-OHS, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT,
USPAT2,
       USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources:   EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
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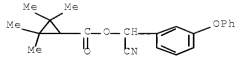

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1518 REFERENCES IN FILE CA (1907 TO DATE)
82 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1536 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> e fenvalerate/cn
E85           1     FENURONE/CN
E86           1     FENVAL/CN
E87           1 --> FENVALERATE/CN
E88           1     FENVALERATE A/CN
E89           1     FENVALERATE B/CN
E90           1     FENVALERATE AA/CN
E91           1     FENVALERATE AB/CN
E92           1     FENVALERATE-AZADIRACHTIN MIXT./CN
E93           1     FENVALERATE-CHLORPYRIFOS MIXTURE/CN
E94           1     FENVALERATE-DEF MIXT./CN
E95           1     FENVALERATE-DIAZINON MIXT./CN
E96           1     FENVALERATE-DICHLORVOS MIXT./CN

=> s e87
L7            1 FENVALERATE/CN

=> d l7

L7   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   51630-58-1  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Benzeneacetic acid, 4-chloro-α-(1-methylethyl)-,
     cyano(3-phenoxyphenyl)methyl ester  (CA INDEX NAME)
OTHER NAMES:
CN   α-Cyano-3-phenoxybenzyl 2-(4-chlorophenyl)isovalerate
CN   Agrofen
CN   Aqmatrine
CN   Belmark
CN   Cyano(3-phenoxyphenyl)methyl 4-chloro-α-(1-
     methylethyl)benzeneacetate
CN   Ectrin
CN   Evercide 2362
CN   Fenaxin
CN   Fenkem
CN   Fenkill
CN   Fenoxin
CN   Fenval
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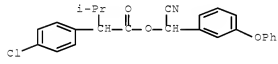
CN Fenvalerate
CN Furitrothion
CN Hafen
CN Insectral
CN Phenaxin
CN Phenoxin
CN Phenvalerate
CN Pydrin
CN S 5602
CN Sanmarton
CN SCS
CN SD 43775
CN Sumicidin
CN Tatafen
CN Tribute
CN Valour
CN Vapcocidin
CN WL 43775
DR 131641-62-8
MF C25 H22 Cl N O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

4396 REFERENCES IN FILE CA (1907 TO DATE)
125 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
4413 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e flucythrinate/cn
E97 1 FLUCYCLOXURON-IKI 220 MIXT./CN
E98 1 FLUCYCLOXURON-THETA-CYPERMETHRIN MIXT./CN
E99 1 --> FLUCYTHRINATE/CN
E100 1 FLUCYTHRINATE-IKI 220 MIXT./CN
E101 1 FLUCYTHRINATE-MALATHION MIXT./CN
E102 1 FLUCYTHRINATE-MONOCROTOPHOS MIXT./CN
E103 1 FLUCYTHRINATE-PENTHIOPYRAD MIXT./CN

```
E104          1     FLUCYTOSIN/CN
E105          1     FLUCYTOSINE/CN
E106          1     FLUDAC/CN
E107          1     FLUDALANINE/CN
E108          1     FLUDARA/CN

=> s e99
L8            1 FLUCYTHRINATE/CN

=> d 18

L8   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   70124-77-5  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Benzeneacetic acid, 4-(difluoromethoxy)-α-(1-methylethyl)-,
     cyano(3-phenoxyphenyl)methyl ester  (CA INDEX NAME)
OTHER NAMES:
CN   α-Cyano-3-phenoxybenzyl 2-[p-(difluoromethoxy)phenyl]isovalerate
CN   AC 222705
CN   CyBolt
CN   Flucythrinate
CN   Fluorocythrin
CN   Pay-Off
DR   102984-46-3, 71611-31-9
MF   C26 H23 F2 N O4
CI   COM
LC   STN Files:   AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
BIOTECHNO, CA,
       CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,
CSNB,
       DDFU, DRUGU, EMBASE, HSDB*, MEDLINE, MRCK*, PROMT, RTECS*,
TOXCENTER,
       USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources:   EINECS**
         (**Enter CHEMLIST File for up-to-date regulatory information)
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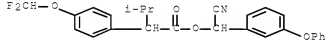


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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

             739 REFERENCES IN FILE CA (1907 TO DATE)
              66 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             747 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> e permethrin/cn
E109          1     PERMETHRIC ACID POTASSIUM SALT/CN
E110          1     PERMETHRIC ACID SODIUM SALT/CN
E111          1 --> PERMETHRIN/CN
```

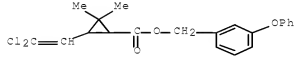
```
E112          1     PERMETHRIN CARBOXYLESTERASE/CN
E113          1     PERMETHRIN ESTERASE/CN
E114          1     PERMETHRIN HYDROLASE/CN
E115          1     PERMETHRIN MONOOXYGENASE/CN
E116          1     PERMETHRIN-ACEPHATE MIXT./CN
E117          1     PERMETHRIN-AMITRAZ MIXT./CN
E118          1     PERMETHRIN-BASSA-MALATHION MIXT./CN
E119          1     PERMETHRIN-BENDIOCARB MIXT./CN
E120          1     PERMETHRIN-CHLORDIMEFORM MIXT./CN

=> s e111
L9            1 PERMETHRIN/CN

=> d l9

L9   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   52645-53-1  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Cyclopropanecarboxylic acid, 3-(2,2-dichloroethenyl)-2,2-dimethyl-
,
     (3-phenoxyphenyl)methyl ester  (CA INDEX NAME)
OTHER NAMES:
CN   (3-Phenoxyphenyl)methyl 2,2-dimethyl-3-(2,2-
     dichlorovinyl)cyclopropanecarboxylate
CN   3-Phenoxybenzyl 2,2-dimethyl-3-(2,2-
dichlorovinyl)cyclopropanecarboxylate
CN   3-Phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-
dimethylcyclopropanecarboxylate
CN   Acticin
CN   Adion
CN   Ambush
CN   Aninsen Per-30
CN   Anomethrin N
CN   Antiborer 3768
CN   Astro
CN   Bansect
CN   Bematin 987
CN   BioKill
CN   Butox 50
CN   Chinetrin
CN   Cooper
CN   Coopex
CN   Corsair
CN   Damminix
CN   Dancide PS 150
CN   Dichlorophenothrin
CN   Diffusil H
CN   Dragnet
CN   Dragnet FT
CN   Dragon
CN   Ecsumin
CN   Ectiban
CN   Efmethrin
CN   Eliminator Ant, Flea & Tick Killer
CN   Elimite
CN   Eulan SPA
CN   Exmin
```

CN FMC 33297
CN FMC 41655
CN ICI-PP 557
CN Imperator
CN Insectal Plus
CN Insorbcid MP
CN Ipitox
CN JF 7065
CN Kaleait
CN Kavil
CN Kestrel
CN Kestrel (pesticide)
CN Kudos
CN Last Call
CN Lyclear
CN m-Methoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate
CN m-Phenoxybenzyl 3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate
CN Mitin BC
CN Permetbrin
ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
DISPLAY
DR 57608-04-5, 60018-94-2, 63364-00-1, 75497-64-2, 93388-66-0
MF C21 H20 Cl2 O3
CI COM
LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*,
BIOSIS, BIOTECHNO, CA, CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST,
CIN, CSCHEM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT,
IFIUDB, IMSPRODUCT, IMSRESEARCH, IPA, MEDLINE, MRCK*, MSDS-OHS, PIRA,
PROMT, RTECS*, SPECINFO, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL,
VETU
(*File contains numerically searchable property data)
Other Sources: EINECS**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5980 REFERENCES IN FILE CA (1907 TO DATE)
157 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
6002 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> e taufluvalinate/cn
E121          1     TAUFENIN/CN
E122          1     TAUFERIN/CN
E123          0 --> TAUFLUVALINATE/CN
E124          1     TAUFON/CN
E125          1     TAUGLICOLCILLIN/CN
E126          1     TAUKARD/CN
E127          1     TAULIN/CN
E128          1     TAULIZ/CN
E129          1     TAUMIDRINE/CN
E130          1     TAUMUSTINE/CN
E131          1     TAUMYCIN A/CN
E132          1     TAUMYCIN B/CN

=> e fluvalinate/cn
E133          1     FLUTROPIUM BROMIDE/CN
E134          1     FLUVAL/CN
E135          1 --> FLUVALINATE/CN
E136          1     FLUVALINATE-AMITRAZ MIXT./CN
E137          1     FLUVALINATE-BROMFENVINPHOS MIXT./CN
E138          1     FLUVALINATE-BROMOPROPYLATE MIXT./CN
E139          1     FLUVALINATE-CHLORPYRIFOS MIXT./CN
E140          1     FLUVALINATE-HEPTENOPHOS MIXT./CN
E141          1     FLUVALINATE-MALATHION MIXT./CN
E142          1     FLUVALINATE-PENTHIOPYRAD MIXT./CN
E143          1     FLUVALINATE-TOLFENPYRAD MIXT./CN
E144          1     FLUVAROL/CN

=> s e135
L10           1 FLUVALINATE/CN

=> d l10

L10  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   69409-94-5  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Valine, N-[2-chloro-4-(trifluoromethyl)phenyl]-,
     cyano(3-phenoxyphenyl)methyl ester  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   DL-Valine, N-[2-chloro-4-(trifluoromethyl)phenyl]-,
     cyano(3-phenoxyphenyl)methyl ester
OTHER NAMES:
CN   Fluvalinate
CN   ZR 3210
DR   79472-91-6
MF   C26 H22 Cl F3 N2 O3
CI   COM
LC   STN Files:   AGRICOLA, ANABSTR, AQUIRE, BIOSIS, BIOTECHNO, CA,
CABA,
       CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, DDFU,
DRUGU,
       EMBASE, HSDB*, MEDLINE, MRCK*, MSDS-OHS, PATDPASPC, PROMT,
RTECS*,
       TOXCENTER, USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
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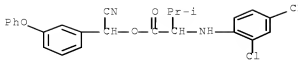


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

824 REFERENCES IN FILE CA (1907 TO DATE)
54 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
831 REFERENCES IN FILE CAPLUS (1907 TO DATE)

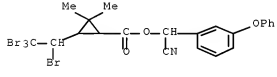
```
=> e tralomethrin/cn
E145          1     TRALKOXYDIM-TRIFLURALIN MIXT./CN
E146          1     TRALOCYTHRIN/CN
E147          1 --> TRALOMETHRIN/CN
E148          1     TRALOMETHRIN-ENDOSULFAN MIXT./CN
E149          1     TRALOMETHRIN-IKI 220 MIXT./CN
E150          1     TRALOMETHRIN-PROPICONAZOLE MIXT./CN
E151          1     TRALONIDE/CN
E152          1     TRALPUSH PROTEIN (HUMAN CLONE HCP38530-
197000064918009 GENE
                    TRALPUSH)/CN
E153          1     TRAM (AGROBACTERIUM TUMEFACIENS GENE TRAM)/CN
E154          1     TRAM (BACTEROIDES FRAGILIS STRAIN YCH46)/CN
E155          1     TRAM (CITROBACTER FREUNDII GENE TRAM)/CN
E156          1     TRAM (ERWINIA AMYLOVORA STRAIN LEBB66 COUNTRY
LEBANON PLASMI
                    D PEL60 GENE TRAM)/CN

=> s e147
L11           1 TRALOMETHRIN/CN

=> d l11

L11  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   66841-25-6  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(1,2,2,2-
tetrabromoethyl)-,
     cyano(3-phenoxyphenyl)methyl ester  (CA INDEX NAME)
OTHER NAMES:
CN   Bengal Fire Ant Killer
CN   HAG 107
CN   RU 25472
CN   SAGA
CN   Scout
CN   Scout X-tra
CN   Tracker
CN   Tralomethrin
DR   81604-63-9
```

MF C22 H19 Br4 N O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, CA, CAPLUS,
CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, EMBASE, HSDB*, MEDLINE,
MRCK*, MSDS-OHS, PIRA, PROMT, RTECS*, TOXCENTER, ULIDAT, USPAT2, USPATFULL
(*File contains numerically searchable property data)
Other Sources: EINECS**
(**Enter CHEMLIST File for up-to-date regulatory information)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

454 REFERENCES IN FILE CA (1907 TO DATE)
72 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
458 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> e bifenthrin/cn
E157          1     BIFENOX-SAP MIXT./CN
E158          1     BIFENOX-TRIFLURALIN MIXT./CN
E159          1 --> BIFENTHRIN/CN
E160          1     BIFENTHRIN-ACEPHATE MIXT./CN
E161          1     BIFENTHRIN-ACETAMIPRID MIXT./CN
E162          1     BIFENTHRIN-ACRINATHRIN MIXT./CN
E163          1     BIFENTHRIN-AMITRAZ MIXT./CN
E164          1     BIFENTHRIN-ATRAZINE MIXT./CN
E165          1     BIFENTHRIN-CARBOSULFAN MIXT./CN
E166          1     BIFENTHRIN-CHLORDIMEFORM MIXT./CN
E167          1     BIFENTHRIN-CLOTHIANIDIN MIXT./CN
E168          1     BIFENTHRIN-CYFLUTHRIN MIXT./CN

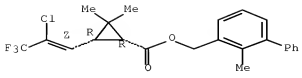
=> s e159
L12           1 BIFENTHRIN/CN

=> d l12

L12  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   82657-04-3  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propen-1-
     yl]-2,2-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester,
```

(1R,3R)-rel- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester, [1α,3α(Z)]-(±)-
CN Cyclopropanecarboxylic acid, 3-[(1Z)-2-chloro-3,3,3-trifluoro-1-propenyl]-2,2-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester, (1R,3R)-rel-
(9CI)
OTHER NAMES:
CN AGST 02002
CN Bifenthrin
CN Bifenthrine
CN Biflex
CN Biflex FT
CN Biphenate
CN Biphenthrin
CN Biphentrin
CN Brigade
CN Brigade 10WP
CN Brigata Flo
CN Capture
CN Capture (pesticide)
CN Capture LFR
CN Cyclopropanecarboxylic acid, 3-(2-chloro-3,3,3-trifluoro-1-propenyl)-2,2-dimethyl-, (2-methyl[1,1'-biphenyl]-3-yl)methyl ester, [1α,3α(Z)]-
CN Discipline
CN Empower
CN Fanfare
CN FMC 54800
CN Kiros EV
CN Onyx
CN Onyx (insecticide)
CN Seizer
CN Semafor
CN Silencer
CN Talstar
CN TalstarOne
FS STEREOSEARCH
DR 92880-79-0, 107497-60-9, 107538-32-9
MF C23 H22 Cl F3 O2
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, CA, CABA,
CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, EMBASE,
HSDB*, MEDLINE, MRCK*, PIRA, PROMT, RTECS*, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)

Relative stereochemistry.
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1698 REFERENCES IN FILE CA (1907 TO DATE)
104 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1730 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> e cycloprothrin/cn
E169          1     CYCLOPROPYNYL CATION/CN
E170          1     CYCLOPROPYNYLIDYNE/CN
E171          1 --> CYCLOPROTHRIN/CN
E172          1     CYCLOPROTHRIN-IKI 220 MIXT./CN
E173          1     CYCLOPROTHRIN-MONOCROTOPHOS MIXT./CN
E174          1     CYCLOPROTHRIN-PENTHIOPYRAD MIXT./CN
E175          1     CYCLOPROTOBULOXINE C/CN
E176          1     CYCLOPROTOBUXINAMINE/CN
E177          1     CYCLOPROTOBUXINE A/CN
E178          1     CYCLOPROTOBUXINE C/CN
E179          1     CYCLOPROTOBUXINE C, N-ISOBUTYRYL-/CN
E180          1     CYCLOPROTOBUXINE D/CN

=> s e171
L13           1 CYCLOPROTHRIN/CN

=> d l13

L13  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   63935-38-6  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Cyclopropanecarboxylic acid, 2,2-dichloro-1-(4-ethoxyphenyl)-,
     cyano(3-phenoxyphenyl)methyl ester  (CA INDEX NAME)
OTHER NAMES:
CN   Cycloprothrin
CN   Cyclosal
CN   Cyclosal (insecticide)
CN   GH 414
CN   NK 8116
CN   Phencyclate
MF   C26 H21 Cl2 N O4
CI   COM
LC   STN Files:   AGRICOLA, AQUIRE, BIOSIS, CA, CAPLUS, CASREACT, CBNB,
       CHEMCATS, CHEMLIST, CIN, PROMT, RTECS*, TOXCENTER, USPAT2,
USPATFULL
         (*File contains numerically searchable property data)
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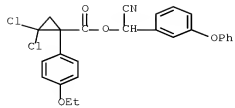

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

177 REFERENCES IN FILE CA (1907 TO DATE)
58 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
180 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> e eflusilinate/cn
E181 1 EFLUMAST/CN
E182 1 EFLUSILANAT/CN
E183 0 --> EFLUSILINATE/CN
E184 1 EFLUX PROTEIN (FRANCISELLA TULARENSIS TULARENSIS STRAIN FSC
198)/CN
E185 1 EFLUX PROTEIN (FRANCISELLA TULARENSIS TULARENSIS STRAIN SCHU
S4)/CN
E186 1 EFM 2E02/CN
E187 1 EFMA/CN
E188 1 EFMETHRIN/CN
E189 1 EFN 4230/CN
E190 1 EFNA2-PROV PROTEIN (XENOPUS LAEVIS CLONE MGC:53535 IMAGE:557
2815)/CN
E191 1 EFNA3-PROV PROTEIN (XENOPUS LAEVIS CLONE MGC:64593 IMAGE:688
1147)/CN
E192 1 EFNB1 PROTEIN (MOUSE STRAIN FVB/N CLONE MGC:11458 IMAGE:2648
527)/CN

=> e flusilinate/cn
E193 1 FLUSILFOCON/CN
E194 1 FLUSILFOCON E/CN
E195 0 --> FLUSILINATE/CN
E196 1 FLUSIN F/CN
E197 1 FLUSIN GH/CN
E198 1 FLUSOL/CN
E199 1 FLUSONE/CN
E200 1 FLUSOXOLOL/CN
E201 1 FLUSPIPERONE/CN
E202 1 FLUSPIRILEN/CN
E203 1 FLUSPIRILENE/CN
E204 1 FLUSPIRILINE/CN

```
=> e fubfenprox/cn
E205          1     FUBERIDAZOLE/CN
E206          1     FUBERIDAZOLE-TRIADIMENOL MIXT./CN
E207          1 --> FUBFENPROX/CN
E208          1     FUBIZHI/CN
E209          1     FUBOL/CN
E210          1     FUBOL GOLD/CN
E211          1     FUBP1 PROTEIN (HUMAN CLONE IMAGE:4330984 GENE
FUBP1)/CN
E212          1     FUBP1 PROTEIN (HUMAN CLONE MGC:29580
IMAGE:4891583)/CN
E213          1     FUBP1-PROV PROTEIN (XENOPUS LAEVIS CLONE MGC:53183
IMAGE:554
                    3059)/CN
E214          1     FUBROGONIUM IODIDE/CN
E215          1     FUBROMEGAN/CN
E216          1     FUC 1582/CN

=> s e207
L14           1 FUBFENPROX/CN

=> d l14

L14  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   111872-58-3  REGISTRY
ED   Entered STN:  19 Dec 1987
CN   Benzene, 1-[[2-[4-(bromodifluoromethoxy)phenyl]-2-
methylpropoxy]methyl]-3-
     phenoxy-  (CA INDEX NAME)
OTHER NAMES:
CN   4-Bromodifluoromethoxyneophyl 3-phenoxybenzyl ether
CN   Anniverse
CN   Brofenprox
CN   Fubfenprox
CN   Halfenprox
CN   MTI 732
CN   Sirbon
MF   C24 H23 Br F2 O3
CI   COM
SR   CA
LC   STN Files:   ANABSTR, BIOSIS, CA, CAPLUS, CASREACT, CBNB,
CHEMCATS,
       CHEMLIST, TOXCENTER, USPAT2, USPATFULL
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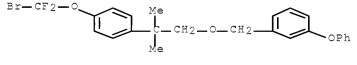


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**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

             162 REFERENCES IN FILE CA (1907 TO DATE)
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46 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
165 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> e resmethrin/cn
E217          1     RESLOOM M 75/CN
E218          1     RESLOOM RM 441/CN
E219          1 --> RESMETHRIN/CN
E220          1     RESMIN/CN
E221          1     RESMIT/CN
E222          1     RESNO TL/CN
E223          1     RESNSAND 34H/CN
E224          1     RESNSAND 34S/CN
E225          1     RESNSAND 69N/CN
E226          1     RESNSAND 87P/CN
E227          1     RESO/CN
E228          1     RESO BLUE/CN

=> s e219
L15           1 RESMETHRIN/CN

=> d l15

L15  ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2009 ACS on STN
RN   10453-86-8  REGISTRY
ED   Entered STN:  16 Nov 1984
CN   Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propen-1-
yl)-,
     [5-(phenylmethyl)-3-furanyl]methyl ester  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   3-Furanmethanol, 5-benzyl-, 2,2-dimethyl-3-(2-
     methylpropenyl)cyclopropanecarboxylate (8CI)
CN   Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methyl-1-propenyl)-
,
     [5-(phenylmethyl)-3-furanyl]methyl ester (9CI)
CN   Cyclopropanecarboxylic acid, 2,2-dimethyl-3-(2-methylpropenyl)-,
     (5-benzyl-3-furyl)methyl ester (8CI)
OTHER NAMES:
CN   (5-Benzyl-3-furyl)methyl 2,2-dimethyl-3-(2-
     methylpropenyl)cyclopropanecarboxylate
CN   (5-Benzyl-3-furyl)methyl chrysanthemate
CN   (5-Benzyl-3-furyl)methyl-DL-cis, trans-chrysanthemate
CN   5-Benzyl-3-furylmethyl (±)-cis-trans-chrysanthemate
CN   5-Benzylfurfuryl chrysanthemate
CN   ARI-B
CN   Chrysron
CN   Crossfire
CN   dl-cis,trans-[(5-Benzyl-3-furyl)methyl]chrysanthemumate
CN   Enforcer
CN   NIA 17370
CN   NRDC 104
CN   Penick 1382
CN   Penncapthrin
CN   Pyresthrin
CN   Resmethrin
CN   SBP 1382
CN   SBP 1383
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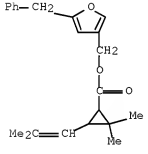
CN Seco
CN [5-(Phenylmethyl)-3-furanyl]methyl
    2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate
DR 24004-07-7
MF C22 H26 O3
CI COM
LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS,
BIOTECHNO, CA,
      CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM,
CSNB,
      DDFU, DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE,
MSDS-OHS,
      PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USPAT2,
      USPATFULL, USPATOLD
        (*File contains numerically searchable property data)
    Other Sources: DSL**, EINECS**
        (**Enter CHEMLIST File for up-to-date regulatory information)



http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

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=> s l24
L25         381 L24

=> s l25 and (l2-l10)
           5861 L2
            981 L3
              2 L4
            768 L5
           1536 L6
           4413 L7
            747 L8
           6002 L9
            831 L10
L26          85 L25 AND ((L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9
OR L10))

=> s l26 and pesticides/ct
          51027 PESTICIDES/CT
L27          13 L26 AND PESTICIDES/CT
```

```
=> s l27 and (py<2003 or ay<2003 or pry<2003)
      22983870 PY<2003
       4505991 AY<2003
       3975343 PRY<2003
L28            2 L27 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> d l28 ibib abs ti hit 1-2

L28  ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2004:453202  CAPLUS  Full-text
DOCUMENT NUMBER:          141:23526
TITLE:                    Novel pyrazole-based anthranilamide
insecticides and
                          their preparation, compositions, and use
INVENTOR(S):              Hughes, Kenneth Andrew; Lahm, George Philip;
Selby,
                          Thomas Paul
PATENT ASSIGNEE(S):       E.I. Du Pont De Nemours and Company, USA
SOURCE:                   PCT Int. Appl., 96 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.         DATE
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     WO 2004046129        A2    20040603    WO 2003-US36167
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OTHER SOURCE(S): MARPAT 141:23526
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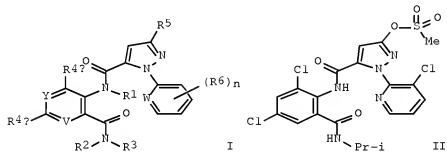

AB The invention provides title compds. I and their N-oxides and suitable salts [wherein: Y, V = N or CR4a; W = N, CH, or CR6; R1 = H, (un)substituted alkyl, alkenyl, alkynyl or cycloalkyl, alkylcarbonyl, alkoxycarbonyl, (di)alkylaminocarbonyl; R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl, alkoxy, (di)alkylamino, cycloalkylamino, alkoxycarbonyl, or alkylcarbonyl; R3 = H, G, (un)substituted alkyl, alkenyl, alkynyl or cycloalkyl; or NR2R3 = (un)substituted heterocyclic (N/O/S) ring; G = (un)substituted 5- or 6-membered non-aromatic carbo- or heterocyclic ring; R4a, R4b = H, various carbon and heteroat. substituents; R5 = alk(en/yn)yl, various derivs. of OH, SH, and NH2; R6 = (halo)alk(en/yn)yl, OH and derivs. or thio analogs, halo, cyano, CO2H, (di)alkylamino, (un)substituted Ph, PhCH2, PhCO, PhO, etc.; n = 0-4]. The invention also pertains to compns. for controlling invertebrate pests, comprising a biol. effective amount of I, their N-oxides, or their agronomically or nonagronomically suitable salts, and at least one addnl. component selected from surfactants, solid diluents, and liquid diluents, and optionally further comprising an effective amount of at least one addnl. biol. active compound or agent. Also disclosed are methods for controlling invertebrate pests by contact of the pests or their environment with said compds. Eighteen compds. I were prepared and tested. For

instance, 3-chloro-2-hydrazinopyridine was cyclocondensed with di-Et maleate to give 55% Et 1-(3-chloro-2-pyridinyl)-3-pyrazolidinone-5-carboxylate, which was oxidized to a dihydropyrazolone, saponified to an acid, cyclized with dichloroanthranilic acid to give a benzoxazinone, O-mesylated at the pyrazolone, and ring-opened with MeNH2, to give invention compound II. In a test of larval Plutella xylostella on radish plants, II at 50 ppm (spray) reduced feeding damage by 80% or more. Compds. I were also effective against Spodoptera frugiperda, Myzus persicae, and Empoasca fabae.

L28 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2002:465981 CAPLUS Full-text
DOCUMENT NUMBER: 137:47212
TITLE: Preparation of quinazolinones and pyridopyrimidinones
for controlling invertebrate pests
INVENTOR(S): Annis, Gary David; Myers, Brian James; Selby, Thomas
Paul; Stevenson, Thomas Martin; Zimmerman, William
Thomas
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 180 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

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OTHER SOURCE(S):          MARPAT 137:47212
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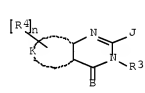

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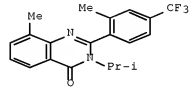

II

AB The title compds. [I; B = O, S; J = (un)substituted Ph, naphthyl, 5–6 membered heteroarom. ring, etc.; K, together with the two contiguous liking carbon atoms = a fused Ph, or fused pyridinyl, each optionally substituted with 1–4 R4; R3 = G, alkyl, cycloalkyl, etc.; G = (un)substituted Ph, 5–6 membered heteroarom. ring, etc.; R4 = H, alkyl, haloalkyl, etc.; n = 1–4], useful for controlling invertebrate pests, were prepared E.g. a multi-step synthesis of II which provided very good level of plant protection (20% or less feeding damage) in in test on diamondback moth (Plutella xylostella)/radish plant, was given. This invention also pertains to certain compds. I and compns. for controlling invertebrate pests comprising a biol. effective amount of a compound I and at least one addnl. component selected from the group consisting of surfactants, solid diluents and liquid diluents. [This abstract record is one of 3 records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.]


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L36  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2003:261833  CAPLUS  Full-text
DOCUMENT NUMBER:          138:287669
TITLE:                    Preparation of pyrazolylcarbonyl pyridinyl
                          anthranilamides as arthropodicides
INVENTOR(S):              Zimmerman, William Thomas
PATENT ASSIGNEE(S):       E. I. Du Pont de Nemours & Co., USA
SOURCE:                   PCT Int. Appl., 46 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

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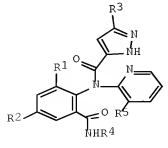

I

AB Title compds. [I; R1, R2 = H, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, haloalkenyl, haloalkynyl, halo, cyano, alkoxy, haloalkoxy, alkylthio, alkylsulfonyl, trialkylsilyl, etc.; R3 = H, alkyl, haloalkyl, halo, cyano, NO2, alkoxy, haloalkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, haloalkylthio, alkoxycarbonyl, etc.; R4 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl; R5 = H, alkyl, alkenyl, alkynyl, cycloalkyl, haloalkyl, haloalkenyl, haloalkynyl, halocycloalkyl, halo, cyano, CO2H, CONH2, NO2, OH, alkoxy, haloalkoxy, alkylthio, alkylsuifinyl, alkylsulfonyl, alkylamino, alkylcarbonyl, alkoxycarbonyl, trialkylsilyl, etc.], were prepared Thus, 1-(3-chloro-2-pyridinyl)-3-trifluoromethyl-1H- pyrazole-5-carboxylic acid (preparation given) was stirred with (COCl)2 and cat. DMF in CH2Cl2 to give crude acid chloride, which was refluxed 3 h with 8-methyl-2H-3,1-benzoxazine-2,4(1H)-dione (preparation given) and pyridine in MeCN to give 2-[1-(3-chloro-2-pyridinyl)-3-trifluoromethyl-1H-pyrazol-5- yl]-8-methyl-4H-3,1-benzoxazin-4-one. The latter was refluxed 1.5 h with Me2CHNH2 to give 1-(3-chloro-2-pyridinyl)-N-[2-methyl-6-[[(1-methylethyl)amino]carbonyl]phenyl]-3-trifluoromethyl-1H-pyrazole-5- carboxamide. This was stirred overnight with DBU in MeCN to give N-(3-chloro-2-pyridinyl)-N-[2-methyl-6-[[(1-methylethyl)amino]carbonyl]phenyl]-5-trifluoromethyl-1H-pyrazole-3- carboxamide. The latter at 250 ppm on radishes preinfested with Plutella xylostella gave ≤10% feeding damage.

TI Preparation of pyrazolylcarbonyl pyridinyl anthranilamides as arthropodicides

L36 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:242097 CAPLUS Full-text
DOCUMENT NUMBER: 138:267201
TITLE: Pesticidal compositions for coating plant propagation material containing anthranilamides
INVENTOR(S): Berger, Richard Alan; Flexner, John Lindsey
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 147 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

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OTHER SOURCE(S): MARPAT 138:267201
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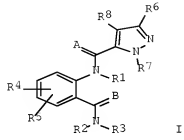

I

AB An invertebrate pest control composition for coating a propagule comprises (1) a biol. effective amount of an anthranilamide compds. I (Markush included), an N-oxide thereof or an agriculturally suitable salt thereof, and (2) a film former or adhesive agent. Arthropodicidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones, γ-aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, and fungicides. The propagule is a seed of cotton, maize, soybean, rice, etc., or a rhizome, tuber, bulb or corm, or viable division thereof, of potato, sweet potato, garden onion, tulip, daffodil, crocus hyacinth, etc., or is a stem or leaf cutting.

TI Pesticidal compositions for coating plant propagation material containing anthranilamides

L36 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:154155 CAPLUS Full-text
DOCUMENT NUMBER: 138:200332
TITLE: Arthropodicidal anthranilamides
INVENTOR(S): Lahm, George Philip; Selby, Thomas Paul; Stevenson, Thomas Martin
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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OTHER SOURCE(S): MARPAT 138:200332
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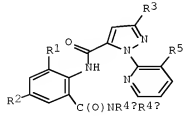

I

AB Anthranilamides I (Markush included), their N-oxides and agriculturally suitable salts are prepared as arthropodicides for controlling invertebrate pests. Arthropodicidal compns. containing anthranilamides I may further include addnl. biol.

active compds. or agents selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones, γ-aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, Bacillus thuringiensis sp. aizawai, B. thuringiensis sp. kurstaki, B. thuringiensis delta endotoxin, baculoviruses, and entomopathogenic bacteria, viruses and fungi.

L36 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:154154 CAPLUS Full-text
DOCUMENT NUMBER: 138:200331
TITLE: Method for controlling particular insect pests by
applying anthranilamide compounds
INVENTOR(S): Lahm, George Philip; McCann, Stephen Frederick; Patel,
Kanu Maganbhai; Selby, Thomas Paul; Stevenson, Thomas
Martin
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 150 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

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OTHER SOURCE(S): MARPAT 138:200331

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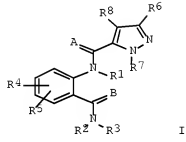

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AB Anthranilamide compds. I (Markush included), N-oxides or an agriculturally suitable salts thereof are prepared as insecticides for controlling lepidopteran, homopteran, hemipteran, thysanopteran and coleopteran insect pests. Insecticidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones, γ-aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics.

http://www.cas.org/support/stngen/stndoc/properties.html

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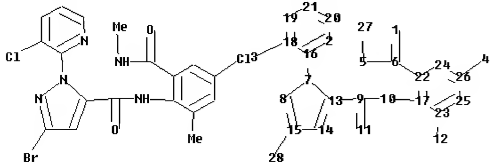

EP 2002-750482 A3

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15-28
ring bonds :
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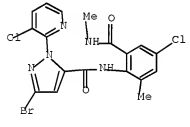


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L13          4 L12 AND (PY<2003 OR AY<2003 OR PRY<2003)

L13  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2004:270097  CAPLUS  Full-text
DN   140:282468
TI   Cloning and characterization of insect ryanodine receptors and
their use
     for screening for insecticidal compounds
IN   Caspar, Timothy; Cordova, Daniel; Gutteridge, Steven; Rauh, James
J.;
     Smith, Rejane M.; Wu, Lihong; Tao, Yong
PA   E. I. Du Pont de Nemours and Company, USA
SO   PCT Int. Appl., 731 pp.
     CODEN: PIXXD2
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RE.CNT  2     THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13  ANSWER 2 OF 4  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2003:242097  CAPLUS  Full-text
DN   138:267201
TI   Pesticidal compositions for coating plant propagation material
containing
     anthranilamides
IN   Berger, Richard Alan; Flexner, John Lindsey
PA   E. I. Du Pont de Nemours & Co., USA
SO   PCT Int. Appl., 147 pp.
     CODEN: PIXXD2
DT   Patent
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RE.CNT  2      THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L13  ANSWER 3 OF 4  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2003:154155  CAPLUS  Full-text
DN   138:200332
TI   Arthropodicidal anthranilamides
IN   Lahm, George Philip; Selby, Thomas Paul; Stevenson, Thomas Martin
PA   E. I. Du Pont de Nemours & Co., USA
SO   PCT Int. Appl., 82 pp.
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RE.CNT  4      THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L13  ANSWER 4 OF 4  CAPLUS  COPYRIGHT 2009 ACS on STN
AN   2003:154154  CAPLUS  Full-text
DN   138:200331
TI   Method for controlling particular insect pests by applying
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IN   Lahm, George Philip; McCann, Stephen Frederick; Patel, Kanu
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     Selby, Thomas Paul; Stevenson, Thomas Martin
PA   E. I. Du Pont de Nemours & Co., USA
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L15  ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER:         2004:270097  CAPLUS  Full-text
DOCUMENT NUMBER:          140:282468
TITLE:                    Cloning and characterization of insect
ryanodine
                          receptors and their use for screening for
insecticidal
                          compounds
INVENTOR(S):              Caspar, Timothy; Cordova, Daniel; Gutteridge,
Steven;
                          Rauh, James J.; Smith, Rejane M.; Wu, Lihong;
Tao,
                          Yong
PATENT ASSIGNEE(S):       E. I. Du Pont de Nemours and Company, USA
SOURCE:                   PCT Int. Appl., 731 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

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PRIORITY APPLN. INFO.: US 2002-412795P P 20020923 <--

US 2002-427324P P 20021118 <--

US 2003-668767 A3 20030923

WO 2003-US29834 W 20030923

AB The genes encoding ryanodine receptor homologs are provided from multiple insect families including lepidopteran tobacco budworm (Heliothis virescens), homopteran green peach aphid (Myzus persicae), corn plant hopper (Peregrinus maidis), cotton melon aphid (Aphis gossypii), and fruitfly (Drosophila melanogaster). The full-length genes were isolated, cloned, and amplified in bacterial cells. Expression in insect cells shows that the recombinant protein folds into a functional calcium release channel. The genes and their corresponding polypeptides have a number of uses including, but not limited to, the isolation of other pest ryanodine receptors, the development of screens to identify insecticidally active compds., use of fragments of genes as pesticides, fragments of protein for antibody production, fragments of protein for determination of the structure of insecticide binding sites, and identification of insecticides that disrupt the calcium balance in cells through other messengers that interact with the receptor calcium release mechanism. Methods are outlined for overcoming toxic effects of expressing recombinant proteins in host cells.

TI Cloning and characterization of insect ryanodine receptors and their use for screening for insecticidal compounds

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(cloning and characterization of insect ryanodine receptors and their
use for screening for insecticidal compds.)

L15 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2004:101149 CAPLUS Full-text
DOCUMENT NUMBER: 140:146150
TITLE: Method for preparing fused oxazinones by cyclocondensation of ortho-amino aromatic carboxylic acids with carboxylic acids
INVENTOR(S): Taylor, Eric Deguyon
PATENT ASSIGNEE(S): E.I. Du Pont de Nemours and Company, USA
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

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OTHER SOURCE(S): MARPAT 140:146150
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A method for preparing a fused oxazinone [I; J = an optionally substituted carbon moiety; K together with the two contiguous liking carbon atoms = each (un)substituted a fused Ph ring or a fused 5- or 6-membered heteroarom. ring] is disclosed in which (1) a carboxylic acid of formula J-CO2H is contacted with a sulfonyl chloride of formula LS(O)2Cl [L= each (un)substituted alkyl, haloalkyl, or Ph] in the presence of an optionally substituted pyridine compound, the nominal mole ratio of sulfonyl chloride to carboxylic acid being from about 0.75 to 1.5; (2) the mixture prepared in (1) is contacted with an ortho-amino aromatic carboxylic acid in the presence of an optionally substituted pyridine compound, the nominal mole ratio of the ortho-amino aromatic carboxylic acid to carboxylic acid (II; K = same as above) charged in (1) being from about 0.8 to 1.2; and (3) addnl. sulfonyl chloride is added to the mixture prepared in (2), the nominal mole ratio of addnl. sulfonyl chloride added in (3) to carboxylic acid charged in (1) being at least about 0.5. More specifically disclosed is a method for preparing a compound of formula (III) [X = N, CR6; Y = N, CH; R1 = H, R2 = H, Me; R3 = C1-6 alkyl; R4 = C1-4 alkyl,halo; R5 = H, C1-4 alkyl, C1-4 haloalkyl, halo; R6, R7 = H, C1-4 alkyl, C1-4 haloalkyl, halo, cyano, C1-4

haloalkyl; R8 = H, C1-4 alkyl, C2-4 alkenyl, C2-4 alkynyl, C3-6 cycloalkyl, C1-4 haloalkyl, C2-4 haloalkenyl, C2-4 haloalkynyl, C3-6 halocycloalkyl, halogen, cyano, NO2, C1-4 alkoxy, C1-4 haloalkoxy, C1-4 alkylthio, C1-4 alkylsulfinyl, C1-4 alkylsulfonyl, C1-4 alkylamino, C2-8 dialkylamino, C3-6 cycloalkylamino, (C1-4 alkyl)(C3-6 cycloalkyl)amino, etc.; R9 = CF3, OCF3, OCHF2, OCH2CF3, S(O)pCF3, S(O)pCHF2, halo; p = 0-2] using a compound of formula (IV; R1 -R5 = same as above; R7-R9 = same as above; X, Y = same as above) that is characterized by preparing the fused oxazinone IV by the method above, using a compound of the formula LS(O)2Cl as the sulfonyl chloride, a compound of formula (V) (R7-R9 = same as above) as the carboxylic acid, and a compound of formula (VI) (R4, R5 = same as above) as the ortho-amino aromatic carboxylic acid.

L15 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:242097 CAPLUS Full-text
DOCUMENT NUMBER: 138:267201
TITLE: Pesticidal compositions for coating plant propagation material containing anthranilamides
INVENTOR(S): Berger, Richard Alan; Flexner, John Lindsey
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 147 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

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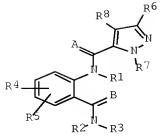

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AB An invertebrate pest control composition for coating a propagule comprises (1) a biol. effective amount of an anthranilamide compds. I (Markush included), an N-oxide thereof or an agriculturally suitable salt thereof, and (2) a film former or adhesive agent. Arthropodicidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones, γ-aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, and fungicides. The propagule is a seed of cotton, maize, soybean, rice, etc., or a rhizome, tuber, bulb or corm, or viable division thereof, of potato, sweet potato, garden onion, tulip, daffodil, crocus hyacinth, etc., or is a stem or leaf cutting.

L15 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:154155 CAPLUS Full-text
DOCUMENT NUMBER: 138:200332
TITLE: Arthropodicidal anthranilamides
INVENTOR(S): Lahm, George Philip; Selby, Thomas Paul; Stevenson,
Thomas Martin
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 82 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

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WO 2003015519	A1	20030227	WO 2002-US25615	20020813 <--

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OTHER SOURCE(S): MARPAT 138:200332
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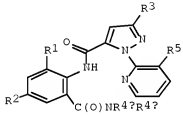

I

AB Anthranilamides I (Markush included), their N-oxides and agriculturally suitable salts are prepared as arthropodicides for controlling invertebrate pests. Arthropodicidal compns. containing anthranilamides I may further include addnl. biol. active compds. or agents selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones, γ-aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics, Bacillus thuringiensis sp. aizawai, B. thuringiensis sp. kurstaki, B. thuringiensis delta endotoxin, baculoviruses, and entomopathogenic bacteria, viruses and fungi.

L15 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:154154 CAPLUS Full-text

DOCUMENT NUMBER: 138:200331
TITLE: Method for controlling particular insect pests by
applying anthranilamide compounds
INVENTOR(S): Lahm, George Philip; McCann, Stephen Frederick; Patel,
Kanu Maganbhai; Selby, Thomas Paul; Stevenson, Thomas
Martin
PATENT ASSIGNEE(S): E. I. Du Pont de Nemours & Co., USA
SOURCE: PCT Int. Appl., 150 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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OTHER SOURCE(S):          MARPAT 138:200331
GI
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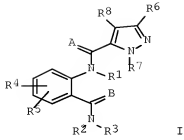

I

AB Anthranilamide compds. I (Markush included), N-oxides or an agriculturally suitable salts thereof are prepared as insecticides for controlling lepidopteran, homopteran, hemipteran, thysanopteran and coleopteran insect pests. Insecticidal composition containing anthranilamide compds. I may further comprise addnl. biol. active compds. selected from arthropodicides of the group consisting of pyrethroids, carbamates, neonicotinoids, neuronal sodium channel blockers, insecticidal macrocyclic lactones, γ-aminobutyric acid (GABA) antagonists, insecticidal ureas, and juvenile hormone mimics.